KW fungicide; antiparasitic; antiarteriosclerotic; vulnerary; cytostatic;
KW haemopoietic; haematologic; anaemia; autoimmune disorder;
KW rheumatoid arthritis; inflammation; Grave's disease; diabetes;
KW systemic lupus erythematosus; glomerulonephritis; neurodegenerative;
KW Parkinson's; Alzheimer's; wound; hyperproliferative; atherosclerosis;
KW cancer; bacterial; viral; fungal; parasitic infection; gene therapy;
KW human; gene; ds.
XX
OS Homo sapiens.
XX
PN WO2003038063-A2.
XX
PD 08-MAY-2003.
XX
PF 19-MAR-2002; 2002WO-US008277.
XX
PR 21-MAR-2001; 2001US-0277340P.
PR 19-JUL-2001; 2001US-0306171P.
PR 13-NOV-2001; 2001US-0331287P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-430516/40.
DR P-PSDB; ADC74152.
XX
PT New human secreted polypeptide for diagnosing, preventing or treating
PT hematopoietic or hematologic disorders (e.g. anemia), autoimmune
PT disorders (e.g. diabetes) or hyperproliferative disorders (e.g. cancer or
PT atherosclerosis).
XX
PS Claim 27; SEQ ID NO 170; 2272pp; English.
XX
CC The invention relates to a novel human secreted polypeptide comprising a
CC defined sequence given in the specification. The polypeptide, nucleic
CC acid molecule, antibody, agonist or antagonist of the invention may be
CC useful for preparing a composition for diagnosing or treating a
CC haemopoietic or haematologic disorder such as anaemia, autoimmune
CC disorders such as rheumatoid arthritis, inflammation, Grave's disease,
CC diabetes, systemic lupus erythematosus or glomerulonephritis,
CC neurodegenerative disorders including Parkinson's disease and Alzheimer's
CC disease, wounds and hyperproliferative disorders including
CC atherosclerosis or cancer, as well as bacterial, viral, fungal or
CC parasitic infections. The polypeptide may also be used during gene
CC therapy procedures and for identifying a binding partner by contacting
CC the polypeptide with a binding partner and determining whether the
CC binding partner increases or decreases the activity of the polypeptide.
CC The current sequence is that of the human secreted protein-related DNA of
CC the invention.
XX
SQ Sequence 2152 BP; 541 A; 526 C; 531 G; 553 T; 0 U; 1 Other;

Query Match 95.3%; Score 2135.6; DB 10; Length 2152;
Best Local Similarity 99.8%; Pred. No. 0;
Matches 2148; Conservative 1; Mismatches 0; Indels 3; Gaps 1;

```
Qy         19 CCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCCTCGTCTTCCTTCCGGGGG 78
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCCTCGTCTTCCTTCCGGGGG 60

Qy         79 ACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCTCTTGGGGCTTTCATGGGA 138
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCTCTTGGGGCTTTCATGGGA 120

Qy        139 CTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCC 198
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCC 180

Qy        199 TAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTG---TGCTGCTGCTGC 255
              ||||||||||||||||||||||||||||||||||||||||||||   ||||||||||||
Db        181 TAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGC 240

Qy        256 TGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCT 315
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 TGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCT 300

Qy        316 TCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCA 375
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 TCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCA 360

Qy        376 TCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGG 435
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 TCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGG 420

Qy        436 CCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTC 495
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 CCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTC 480

Qy        496 CTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGG 555
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 CTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGG 540

Qy        556 GGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTG 615
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 GGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTG 600

Qy        616 ACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTT 675
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 ACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTT 660

Qy        676 ATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCG 735
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 ATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCG 720

Qy        736 CCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGG 795
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 CCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGG 780

Qy        796 AAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCT 855
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 AAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCT 840

Qy        856 CTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAA 915
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 CTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAA 900

Qy        916 TCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGG 975
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        901 TCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGG 960

Qy        976 ATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTC 1035
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        961 ATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTC 1020

Qy       1036 TTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAG 1095
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1021 TTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAG 1080

Qy       1096 TGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAG 1155
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1081 TGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAG 1140

Qy       1156 AATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAA 1215
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1141 AATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAA 1200

Qy       1216 TGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGC 1275
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1201 TGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGC 1260

Qy       1276 CTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCC 1335
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1261 CTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCC 1320

Qy       1336 CTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCT 1395
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Db       1321 CTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCT 1380

Qy       1396 CCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGA 1455
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1381 CCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGA 1440

Qy       1456 TTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTG 1515
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1441 TTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTG 1500

Qy       1516 GAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGG 1575
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1501 GAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGG 1560

Qy       1576 AGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATT 1635
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1561 AGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATT 1620

Qy       1636 CGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCT 1695
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1621 CGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCT 1680

Qy       1696 TTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCA 1755
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1681 TTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCA 1740

Qy       1756 CTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAAT 1815
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1741 CTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAAT 1800

Qy       1816 TTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAG 1875
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1801 TTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAG 1860

Qy       1876 TAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACC 1935
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1861 TAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACC 1920

Qy       1936 TTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCC 1995
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1921 TTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCC 1980

Qy       1996 AGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAA 2055
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1981 AGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAA 2040

Qy       2056 TCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAAT 2115
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2041 TCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAAT 2100

Qy       2116 GATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTG 2167
             ||||||||||||||||||:||||||||||||||||||||||||||||||||
Db       2101 GATCGCCTTTGCTTTACCAYTCTTTCCTTTTATCTTATTAATAAAAATGTTG 2152
```

RESULT 21
ADE11660
ID ADE11660 standard; cDNA; 2152 BP.
XX
AC ADE11660;
XX
DT 29-JAN-2004 (first entry)
XX
DE Human secreted polypeptide cDNA #22.
XX
KW Secreted protein; cancer; liver disorder; hepatitis; neural disorder;
KW Alzheimer's disease; human; ss; gene.
XX
OS Synthetic.
OS Homo sapiens.
XX
PN US2003100051-A1.
XX
PD 29-MAY-2003.
XX
PF 10-SEP-2001; 2001US-00948783.
XX
PR 12-MAY-1998; 98US-0085093P.
PR 12-MAY-1998; 98US-0085094P.
PR 12-MAY-1998; 98US-0085105P.
PR 12-MAY-1998; 98US-0085180P.
PR 18-MAY-1998; 98US-0085906P.
PR 18-MAY-1998; 98US-0085920P.
PR 18-MAY-1998; 98US-0085921P.
PR 18-MAY-1998; 98US-0085922P.
PR 18-MAY-1998; 98US-0085923P.
PR 18-MAY-1998; 98US-0085924P.
PR 18-MAY-1998; 98US-0085925P.
PR 18-MAY-1998; 98US-0085927P.
PR 18-MAY-1998; 98US-0085928P.
PR 06-MAY-1999; 99WO-US009847.
PR 10-NOV-1999; 99US-00437658.
PR 11-SEP-2000; 2000US-0231846P.
PR 28-JUN-2001; 2001US-00892877.
XX
PA (RUBE/) RUBEN S M.
PA (FLOR/) FLORENCE K A.
PA (NIJJ/) NI J.
PA (ROSE/) ROSEN C A.
PA (CART/) CARTER K C.
PA (MOOR/) MOORE P A.
PA (OLSE/) OLSEN H S.
PA (SHIY/) SHI Y.
PA (YOUN/) YOUNG P E.
PA (WEIY/) WEI Y.
PA (BREW/) BREWER L A.
PA (SOPP/) SOPPET D R.
PA (LAFL/) LAFLEUR D W.
PA (ENDR/) ENDRESS G A.
PA (EBNE/) EBNER R.
PA (BIRS/) BIRSE C E.
XX
PI Ruben SM, Florence KA, Ni J, Rosen CA, Carter KC, Moore PA;
PI Olsen HS, Shi Y, Young PE, Wei Y, Brewer LA, Soppet DR, Lafleur DW;
PI Endress GA, Ebner R, Birse CE;
XX
DR WPI; 2003-801210/75.
XX
PT New nucleic acid molecule, useful for preparing a medicament for
PT preventing, treating or ameliorating a medical condition e.g. cancer,
PT liver disorders or neural disorders.
XX
PS Claim 1; SEQ ID NO 32; 453pp; English.
XX
CC The invention relates to human secreted polypeptides and the
CC polynucleotides encoding them. The sequences are useful for preparing
CC medicaments for preventing, treating or ameliorating medical conditions
CC e.g., cancer, liver disorders such as hepatitis or neural disorders such
CC as Alzheimer's disease. This sequence represents cDNA encoding a human
CC secreted polypeptide of the invention.
XX
SQ Sequence 2152 BP; 541 A; 526 C; 531 G; 553 T; 0 U; 1 Other;

```
  Query Match             95.3%;  Score 2135.6;  DB 10;  Length 2152;
  Best Local Similarity   99.8%;  Pred. No. 0;
  Matches 2148;  Conservative    1;  Mismatches    0;  Indels    3;  Gaps    1;

Qy         19 CCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCCTCGTCTTCCTTCCGGGGG 78
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 CCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCCTCGTCTTCCTTCCGGGGG 60

Qy         79 ACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCTCTTGGGGCTTTCATGGGA 138
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 ACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCTCTTGGGGCTTTCATGGGA 120
```

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Qy       139 CTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCC 198
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       121 CTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCC 180

Qy       199 TAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTG---TGCTGCTGCTGC 255
            ||||||||||||||||||||||||||||||||||||||||||||||   ||||||||||||
Db       181 TAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGC 240

Qy       256 TGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCT 315
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       241 TGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCT 300

Qy       316 TCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCA 375
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       301 TCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCA 360

Qy       376 TCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGG 435
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       361 TCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGG 420

Qy       436 CCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTC 495
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       421 CCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTC 480

Qy       496 CTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGG 555
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       481 CTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGG 540

Qy       556 GGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTG 615
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       541 GGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTG 600

Qy       616 ACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTT 675
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       601 ACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTT 660

Qy       676 ATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCG 735
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       661 ATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCG 720

Qy       736 CCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGG 795
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       721 CCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGG 780

Qy       796 AAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCT 855
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       781 AAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCT 840

Qy       856 CTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAA 915
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       841 CTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAA 900

Qy       916 TCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGG 975
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       901 TCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGG 960

Qy       976 ATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTC 1035
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       961 ATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTC 1020

Qy      1036 TTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAG 1095
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1021 TTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAG 1080

Qy      1096 TGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAG 1155
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1081 TGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAG 1140

Qy      1156 AATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAA 1215
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1141 AATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAA 1200

Qy      1216 TGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGC 1275
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1201 TGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGC 1260

Qy      1276 CTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCC 1335
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1261 CTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCC 1320

Qy      1336 CTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCT 1395
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1321 CTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCT 1380

Qy      1396 CCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGA 1455
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1381 CCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGA 1440

Qy      1456 TTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTG 1515
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1441 TTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTG 1500

Qy      1516 GAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGG 1575
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1501 GAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGG 1560

Qy      1576 AGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATT 1635
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1561 AGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATT 1620

Qy      1636 CGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCT 1695
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1621 CGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCT 1680

Qy      1696 TTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCA 1755
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1681 TTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCA 1740

Qy      1756 CTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAAT 1815
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1741 CTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAAT 1800

Qy      1816 TTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAG 1875
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1801 TTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAG 1860

Qy      1876 TAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACC 1935
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1861 TAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACC 1920

Qy      1936 TTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCC 1995
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1921 TTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCC 1980

Qy      1996 AGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAA 2055
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      1981 AGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAA 2040

Qy      2056 TCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAAT 2115
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      2041 TCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAAT 2100

Qy      2116 GATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTG 2167
            ||||||||||||||||||:||||||||||||||||||||||||||||||||||
Db      2101 GATCGCCTTTGCTTTACCAYTCTTTCCTTTTATCTTATTAATAAAAATGTTG 2152
```

RESULT 22
ABL90090
ID ABL90090 standard; cDNA; 2039 BP.
XX
AC ABL90090;
XX
DT 24-MAY-2002 (first entry)
XX
DE Human polynucleotide SEQ ID NO 652.

XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200190304-A2.
XX
PD 29-NOV-2001.
XX
PF 18-MAY-2001; 2001WO-US016450.
XX
PR 19-MAY-2000; 2000US-0205515P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Birse CE, Rosen CA;
XX
DR WPI; 2002-122018/16.
DR P-PSDB; ABB89681.
XX
PT Novel 1405 isolated polypeptides, useful for diagnosis, treatment and
PT prevention of neural, immune system, muscular, reproductive,
PT gastrointestinal, pulmonary, cardiovascular, renal and proliferative
PT disorders.
XX
PS Claim 4; SEQ ID NO 652; 2081pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABL89449-ABL90853) and proteins
CC (ABB89040-ABB90444) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 2039 BP; 532 A; 493 C; 499 G; 513 T; 0 U; 2 Other;

Query Match 84.6%; Score 1896.2; DB 6; Length 2039;
Best Local Similarity 99.2%; Pred. No. 0;
Matches 2001; Conservative 0; Mismatches 3; Indels 13; Gaps 9;

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Qy      170 AAGTTGCTAGAGGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGC 229
            | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        6 AGGTTGCTAGAGGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGC 65

Qy      230 GTCCCTGCTGGCTGTGCTGCTGCTGCTGCT-----GGAGCGCGGCATGTTCTCCTCACCC 284
            |||||||||||||||||||||||||||||     |||||||||||||||||||||||||
Db       66 GTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGCGGAGCGCGGCATGTTCTCCTCACCC 125

Qy      285 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      126 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 185

Qy      345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      186 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 245

Qy      405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db      246 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 305

Qy      465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
            |||||||||||||||||||||||||||||||||||||||||||| ||| ||||||||||||||||
Db      306 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGGTGCTCGATGGTCAGAGTCTT 365

Qy      525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      366 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 425

Qy      585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      426 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 485

Qy      645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      486 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 545

Qy      705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      546 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 605

Qy      765 GTGAATATCAAATTCATCATTGAGGGGATGG-AAGAGGCTGGCTCTG-TTGCCCTGGAGG 822
            |||||||||||||||||||||||||||||| |||||||||||||||| ||||||||||||
Db      606 GTGAATATCAAATTCATCATTGAGGGGATGGAAAGAGGCTGGCTCTGTTTGCCCTGGAGG 665

Qy      823 AACTTGT-GGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCA 881
            ||||||| |||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      666 AACTTGTGGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCA 725

Qy      882 GATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGC 941
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      726 GATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGC 785

Qy      942 TACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGC 1001
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      786 TACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGC 845

Qy     1002 ATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCT 1061
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      846 ATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCT 905

Qy     1062 GGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATA 1121
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      906 GGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATA 965

Qy     1122 AATACATA-CAAAGCCATCCATCTAGACCT-AGAAGAATACCGGAATAGCAGCCGGGTTG 1179
            |||||||| |||||||||||||||||||| |||||||||||||||||||||||||||||||
Db      966 AATACATACCAAAGCCATCCATCTAGACCTAAGAAGAATACCGGAATAGCAGCCGGGTTG 1025

Qy     1180 AGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTC 1239
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1026 AGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTC 1085

Qy     1240 TTTCTATTCATGGGATCGAGGGCGCGTTTG-ATGAGCCTGGAACTAAAACAGTCATACCT 1298
            |||||||||||||||||||||||||||||| ||||||||||||||||||||||||||||||
Db     1086 TTTCTATTCATGGGATCGAGGGCGCGTTTGAATGAGCCTGGAACTAAAACAGTCATACCT 1145

Qy     1299 GGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTG 1358
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1146 GGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTG 1205

Qy     1359 GAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAG 1418
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1206 GAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAG 1265

Qy     1419 ATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAG 1478
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1266 ATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAG 1325

Qy     1479 TATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGG 1538
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1326 TATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGG 1385
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Qy       1539 GATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTG 1598
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1386 GATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTG 1445

Qy       1599 CTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGG 1658
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1446 CTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGG 1505

Qy       1659 TGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTC 1718
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1506 TGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTC 1565

Qy       1719 CATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCCACA 1778
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1566 CATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCCACA 1625

Qy       1779 T-CCCTAGACAGGGATGGAATGTAAATATCCAGAGAATTTGGGTCTAGTATAGTACATTT 1837
             | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1626 TCCCCTAGACAGGGATGGAATGTAAATATCCAGAGAATTTGGGTCTAGTATAGTACATTT 1685

Qy       1838 TCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAGTAATAAAATATTTCAAAGGCAC 1897
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1686 TCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAGTAATAAAATATTTCAAAGGCAC 1745

Qy       1898 AGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCTTG 1957
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1746 AGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCTTG 1805

Qy       1958 CAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCT 2017
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1806 CAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCT 1865

Qy       2018 TTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGG 2077
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1866 TTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGG 1925

Qy       2078 TCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTC 2137
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1926 TCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTC 1985

Qy       2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCA 2174
             ||||||||| |||||||||||||||||||||||||||
Db       1986 TTTCCTTTT-TCTTATTAATAAAAATGTTGGTCTCCA 2021
```

RESULT 23
ADC77690
ID ADC77690 standard; cDNA; 1640 BP.
XX
AC ADC77690;
XX
DT 01-JAN-2004 (first entry)
XX
DE Human 55054 protein encoding cDNA SEQ ID NO:53.
XX
KW pain disorder; pain signalling mechanism; analgesic; antimigraine;
KW antiinflammatory; gene therapy; inflammatory pain; chronic pain;
KW neuropathic pain; neuralgia; fibromyalgia; cancer pain; migraine;
KW headache; pain; human; gene; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 42. .1568
FT /*tag= a
FT /product= "55054 protein"
XX
PN WO2003073983-A2.
XX
PD 12-SEP-2003.
XX
PF 19-FEB-2003; 2003WO-US004816.
XX
PR 28-FEB-2002; 2002US-0360495P.
PR 04-APR-2002; 2002US-0370121P.
PR 16-APR-2002; 2002US-0373010P.
PR 19-APR-2002; 2002US-0373908P.
PR 03-MAY-2002; 2002US-0377717P.
PR 13-MAY-2002; 2002US-0379949P.
PR 21-MAY-2002; 2002US-0382409P.
PR 03-JUN-2002; 2002US-0385280P.
PR 06-JUN-2002; 2002US-0386879P.
PR 10-JUN-2002; 2002US-0387536P.
PR 08-JUL-2002; 2002US-0394376P.
PR 21-AUG-2002; 2002US-0404996P.
PR 19-SEP-2002; 2002US-0412006P.
PR 09-OCT-2002; 2002US-0417327P.
PR 10-OCT-2002; 2002US-0417499P.
PR 15-NOV-2002; 2002US-0426964P.
PR 10-DEC-2002; 2002US-0432320P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Rosenfeld JB, Silos-Santiago I;
XX
DR WPI; 2003-712843/67.
DR P-PSDB; ADC77691.
XX
PT Identifying a compound capable of treating a pain disorder e.g.,
PT neuropathic pain comprises assaying the ability of the compound to
PT modulate the nucleic acid expression or polypeptide activity.
XX
PS Claim 1; SEQ ID NO 53; 277pp; English.
XX
CC The present invention describes a method for identifying a compound (C)
CC capable of treating a pain disorder comprising assaying the ability of
CC the compound to modulate 9949, 14230, 760, 62553, 12216, 17719, 41897,
CC 47174, 33408, 10002, 16209, 314, 636, 27410, 33260, 619, or 13424 nucleic
CC acid expression or 9949, 14230, 760, 62553, 12216, 17719, 41897, 47174,
CC 33408, 10002, 16209, 314, 636, 27410, 33260, 619, 15985, polypeptide
CC activity. Also described: (1) identifying a compound (C) capable of
CC modulating a pain signalling mechanism; and (2) treating a subject having
CC a pain disorder characterised by aberrant nucleic acid expression or
CC polypeptide activity. (C) has analgesic, antimigraine and
CC antiinflammatory activities, and can be used in gene therapy. The method
CC is useful for identifying a modulator compound capable of treating a pain
CC disorder, e.g. inflammatory pain, chronic pain, neuropathic pain,
CC neuralgia, fibromyalgia, cancer pain, migraine/headache pain or tissue
CC pain comprising administering the modulator to a subject having a pain
CC disorder characterised by aberrant nucleic acid expression or polypeptide
CC activity. The present sequence encodes the human 55054 protein from the
CC present invention.
XX
SQ Sequence 1640 BP; 416 A; 397 C; 440 G; 387 T; 0 U; 0 Other;

Query Match 72.1%; Score 1616; DB 10; Length 1640;
Best Local Similarity 99.5%; Pred. No. 0;
Matches 1632; Conservative 0; Mismatches 5; Indels 3; Gaps 1;

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Qy        160 GAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGA 219
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 GAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGA 60

Qy        220 GAATGGCTGCGTCCCTGCTGGCTG---TGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCT 276
              ||||||||||||||||||||||||   ||||||||||||||||||||||||||||||||||
Db         61 GAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCT 120

Qy        277 CCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATC 336
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 CCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATC 180

Qy        337 AGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGC 396
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGC 240
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Qy       397 CTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGC 456
Db       241 CTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGC 300

Qy       457 AGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTC 516
Db       301 AGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTC 360

Qy       517 AGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCA 576
Db       361 AGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCA 420

Qy       577 CCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCA 636
Db       421 CCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCA 480

Qy       637 CGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACA 696
Db       481 CGGACCCCTATGTGCTGACGGAGGTAGGCGGGAAACTTTATGGACGAGGAGCGACCGACA 540

Qy       697 ACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAG 756
Db       541 ACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAG 600

Qy       757 ATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCC 816
Db       601 ATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCC 660

Qy       817 TGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAA 876
Db       661 TGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAA 720

Qy       877 TTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGA 936
Db       721 TTTCAGATAACCTGTGGATCAGCCAAAGGAAGCTAGCAATCACTTACGGAACCCGGGGGA 780

Qy       937 ACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTG 996
Db       781 ACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTG 840

Qy       997 GTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACT 1056
Db       841 GTGGCATCCTTCATGAACTAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACT 900

Qy      1057 CGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGG 1116
Db       901 CGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGG 960

Qy      1117 AAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGG 1176
Db       961 AAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGG 1020

Qy      1177 TTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCAT 1236
Db      1021 TTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCAT 1080

Qy      1237 CTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATAC 1296
Db      1081 CTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATAC 1140

Qy      1297 CTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGG 1356
Db      1141 CTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGG 1200

Qy      1357 TGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACA 1416
Db      1201 TGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACA 1260

Qy      1417 AGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCC 1476
Db      1261 AGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACTC 1320

Qy      1477 AGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCC 1536
Db      1321 AGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCC 1380

Qy      1537 GGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGG 1596
Db      1381 GGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGG 1440

Qy      1597 TGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACA 1656
Db      1441 TGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACA 1500

Qy      1657 GGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGC 1716
Db      1501 GGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGC 1560

Qy      1717 TCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCCA 1776
Db      1561 TCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCCA 1620

Qy      1777 CATCCCTAGACAGGGATGGA 1796
Db      1621 CATCCCTAGACAGGGATGGA 1640
```

RESULT 24
AAS12574
ID AAS12574 standard; DNA; 1587 BP.
XX
AC AAS12574;
XX
DT 03-JAN-2002 (first entry)
XX
DE DNA encoding DPI-45 and DPI-213.
XX
KW Human; depression associated protein isoform; tryptic digest peptide;
KW DPI; cerebrospinal fluid; CSF; BAD; bipolar affective disorder;
KW neuropsychiatric disorder; bipolar mood disorder; neuroleptic; DPI-213;
KW maniac-depressive illness; schizoaffective disorder; DPI-45; ds.
XX
OS Homo sapiens.
XX
FH Key   Location/Qualifiers
FT CDS   35. .1540
FT   /*tag= a
FT   /product= "DPI-45 and DPI-213"
FT   /transl_except= (pos:242. .244,aa:Xaa)
FT   /note= "Xaa= unknown"
FT sig_peptide   35. .94
FT   /*tag= b
FT mat_peptide   95. .1537
FT   /*tag= c
XX
PN WO200162787-A1.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-GB000786.
XX
PR 24-FEB-2000; 2000GB-00004412.
PR 08-DEC-2000; 2000GB-00030050.
PR 12-DEC-2000; 2000US-0254830P.
XX
PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX
PI Herath HMAC, Parekh RB, Rohlff C, Terrett JA, Tyson KL;
XX
DR WPI; 2001-570626/64.
DR P-PSDB; AAU28396.
XX
PT Novel nucleic acid encoding a protein associated with bipolar affective
PT disorder, which is used for diagnosis, prophylaxis and therapy of
PT neuropsychiatric disorders, such as bipolar affective disorder.
XX

```
PS   Disclosure; Fig 2A; 153pp; English.
XX
CC   The present invention relates to the identification of depression
CC   associated protein isoforms (DPIs), particularly the tryptic digest
CC   peptides of these proteins. Some of the DPIs (AAU28404-AAU28625)
CC   described are decreased in the cerebrospinal fluid (CSF) of BAD (bipolar
CC   affective disorder) subjects, whilst other DPIs (AAU28626-AAU28887) are
CC   increased in BAD subjects. Also described are peptide sequences
CC   identified from DPI-45 and DPI-213 and the nucleic acid sequence they are
CC   encoded by. The sequences of the invention are useful for clinical
CC   screening, diagnosis, prognosis, therapy and prophylaxis of
CC   neuropsychiatric disorders e.g. BAD (also known as bipolar mood disorder,
CC   BP), maniac-depressive illnesses, attention deficit disorders,
CC   schizoaffective disorders, and unipolar affective disorders. The present
CC   DNA sequence encodes for DPI-45 and DPI-213
XX
SQ   Sequence 1587 BP; 399 A; 375 C; 418 G; 378 T; 0 U; 17 Other;

  Query Match             68.3%;  Score 1531.6;  DB 4;  Length 1587;
  Best Local Similarity   99.1%;  Pred. No. 0;
  Matches 1533;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy        225 GCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 284
              ||  | |  |||    |  ||||||||||||||||||||||||||||||||||||||||||||
Db         41 GCGTCTTTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 100

Qy        285 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
              |||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db        101 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTNCATCAGGATGAA 160

Qy        345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 220

Qy        405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
              |||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||
Db        221 CGCTTCAGACAAGAGCTCTTCANAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 280

Qy        465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 340

Qy        525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 400

Qy        585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 460

Qy        645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 520

Qy        705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 580

Qy        765 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 824
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 640

Qy        825 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 884
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 700

Qy        885 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 944
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 760

Qy        945 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 1004
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 820

Qy       1005 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 1064
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 880

Qy       1065 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 1124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 940

Qy       1125 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1184
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1000

Qy       1185 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1244
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1060

Qy       1245 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1304
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1120

Qy       1305 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1364
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1180

Qy       1365 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1424
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1240

Qy       1425 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1484
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1241 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1300

Qy       1485 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1544
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1301 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1360

Qy       1545 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1604
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1361 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1420

Qy       1605 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1664
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1421 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1480

Qy       1665 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAA 1724
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1481 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGATCCATTAA 1540

Qy       1725 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1771
              |||||||||||||||||||||||||||||||||||||||||||||
Db       1541 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1587


RESULT 25
AAS42478
ID   AAS42478 standard; DNA; 1587 BP.
XX
AC   AAS42478;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human Schizophrenia-Associated Protein Isoform (SPI) 238/240 DNA.
XX
KW   Schizophrenia-associated protein isoform; SPI; SPI-206; SPI-238; SPI-240;
KW   neuroleptic; gene therapy; cerebrospinal fluid; serum; plasma; ds.
XX
OS   Homo sapiens.
XX
PN   WO200162785-A2.
XX
PD   30-AUG-2001.
XX
```

```
PF   23-FEB-2001; 2001WO-GB000792.
XX
PR   24-FEB-2000; 2000GB-00004415.
PR   28-DEC-2000; 2000US-00750395.
XX
PA   (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX
PI   Herath HMAC,  Parekh RB,  Rohlff C,  Terrett JA,  Tyson KL;
XX
DR   WPI; 2001-570624/64.
DR   P-PSDB; AAU25425.
XX
PT   New schizophrenia associated protein isoforms and encoding nucleic acid
PT   molecules, useful for treatment, diagnosis and prognosis of schizophrenia
PT   and screening for potential drugs for treatment and new drug targets.
XX
PS   Disclosure; Fig 4B; 148pp; English.
XX
CC   The sequence represents DNA encoding a schizophrenia-associated protein
CC   isoform (SPI). These protein isoforms, e.g. SPI-206, SPI-238 and SPI-240
CC   are detectable in cerebrospinal fluid, serum or plasma and are useful
CC   markers of schizophrenia. The sequences can be used for treatment and
CC   diagnosis of schizophrenia, screening, prognosis, monitoring the results
CC   of therapy, identifying patients most likely to respond to a particular
CC   therapy and identification of new targets for drug treatment. SPI DNA is
CC   useful as a nucleic acid probe to detect the presence of nucleic acids or
CC   SPIs
XX
SQ   Sequence 1587 BP; 399 A; 375 C; 418 G; 378 T; 0 U; 17 Other;

  Query Match             68.3%;  Score 1531.6;  DB 4;  Length 1587;
  Best Local Similarity   99.1%;  Pred. No. 0;
  Matches 1533;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy        225 GCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 284
              ||  | |  |||   |  ||||||||||||||||||||||||||||||||||||||||||
Db         41 GCGTCTTTGCTGGCTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 100

Qy        285 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
              |||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db        101 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTNCATCAGGATGAA 160

Qy        345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 220

Qy        405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
              |||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||
Db        221 CGCTTCAGACAAGAGCTCTTCANAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 280

Qy        465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 340

Qy        525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 400

Qy        585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 460

Qy        645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 520

Qy        705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 580

Qy        765 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 824
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 640

Qy        825 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 884
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 700

Qy        885 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 944
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 760

Qy        945 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 1004
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 820

Qy       1005 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 1064
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 880

Qy       1065 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 1124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 940

Qy       1125 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1184
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1000

Qy       1185 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1244
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1060

Qy       1245 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1304
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1120

Qy       1305 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1364
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1180

Qy       1365 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1424
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1240

Qy       1425 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1484
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1241 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1300

Qy       1485 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1544
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1301 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1360

Qy       1545 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1604
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1361 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1420

Qy       1605 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1664
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1421 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1480

Qy       1665 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAA 1724
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db       1481 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGATCCATTAA 1540

Qy       1725 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1771
              |||||||||||||||||||||||||||||||||||||||||||||
Db       1541 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1587


RESULT 26
AAS43075
ID   AAS43075 standard; DNA; 1587 BP.
XX
AC   AAS43075;
XX
DT   18-DEC-2001  (first entry)
```

XX
DE EST AAS26679/AI589129 complete sequence.
XX
KW Human; Bipolar Affective Disorder; BAD; Depression-Associated feature;
KW DF; Depression-Associated protein isoform; DPI; Cerebro-spinal fluid;
KW CSF; antidepressant; antimanic; nootropic; tranquiliser; neuroleptic;
KW attention deficient disorder; schizoaffective disorder; AAS326679; ss;
KW unipolar affective disorder; EST; expressed sequence tag; AI589129.
XX
OS Homo sapiens.
XX
PN WO200163294-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-GB000791.
XX
PR 24-FEB-2000; 2000GB-00004412.
PR 08-DEC-2000; 2000GB-00030050.
PR 12-DEC-2000; 2000US-0254830P.
XX
PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX
PI Herath HMAC, Parekh RB, Rohlff C;
XX
DR WPI; 2001-582081/65.
DR P-PSDB; AAU26557.
XX
PT Preparation for diagnosing or treating bipolar affected disorder (BAD) or
PT unipolar depression, or for screening for modulators, comprises a BAD-
PT associated protein isoform.
XX
PS Disclosure; Fig 2A; 163pp; English.
XX
CC The invention relates to a preparation comprising an isolated Bipolar
CC Affected Disorder (BAD)-Associated Protein Isoform (DPIs). The DPI's are
CC used to screen, diagnose or prognose of BAD or unipolar depression,
CC determine the stage or severity of BAD or unipolar depression, identify a
CC subject at risk of developing BAD or unipolar depression, or monitor the
CC effect of therapy in a subject. They are also used to screen for or
CC identify agents that interact with a DPI. These agents, antibodies
CC against the DPIs, and nucleic acids encoding the DPIs are used to treat
CC or prevent BAD or unipolar depression. Diseases that can be treated are
CC attention deficient disorder, a schizoaffective disorder, a bipolar or a
CC unipolar affective disorder. The DPIs are used in proteomics. The
CC proteomic approach of using DPIs for screening, diagnosis or prognosis of
CC BAD or unipolar depression overcomes the problems of using gene
CC expression analysis, such as not being able to obtain central nervous
CC system (CNS) tissue from a living patient under normal circumstances. The
CC present sequence is a PCR fragment generated from two EST (expressed
CC sequence tags) sequences AAS326679 and AI589129, which express a protein
CC containing DIPs 45 and 213
XX
SQ Sequence 1587 BP; 399 A; 375 C; 418 G; 378 T; 0 U; 17 Other;

Query Match 68.3%; Score 1531.6; DB 4; Length 1587;
Best Local Similarity 99.1%; Pred. No. 0;
Matches 1533; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

```
Qy        225 GCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 284
              ||  | |  |||   |  ||||||||||||||||||||||||||||||||||||||||||
Db         41 GCGTCTTTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 100

Qy        285 TCCCCGCCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
              ||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db        101 TCCCCGCCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTNCATCAGGATGAA 160

Qy        345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 220

Qy        405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
              |||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||
Db        221 CGCTTCAGACAAGAGCTCTTCANAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 280

Qy        465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 340

Qy        525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 400

Qy        585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 460

Qy        645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 520

Qy        705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 580

Qy        765 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 824
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 640

Qy        825 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 884
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 700

Qy        885 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 944
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 760

Qy        945 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 1004
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 820

Qy       1005 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 1064
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 880

Qy       1065 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 1124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 940

Qy       1125 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1184
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1000

Qy       1185 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1244
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1060

Qy       1245 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1304
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1120

Qy       1305 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1364
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1180

Qy       1365 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1424
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1240

Qy       1425 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1484
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1241 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1300

Qy       1485 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1544
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1301 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1360
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Qy       1545 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1604
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1361 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1420

Qy       1605 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1664
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1421 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1480

Qy       1665 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAA 1724
             |||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db       1481 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGATCCATTAA 1540

Qy       1725 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1771
             |||||||||||||||||||||||||||||||||||||||||||||||
Db       1541 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1587
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RESULT 27
AAS23811
ID AAS23811 standard; DNA; 1587 BP.
XX
AC AAS23811;
XX
DT 24-OCT-2001 (first entry)
XX
DE DNA encoding schizophrenia-associated isoform SPI-238/240.
XX
KW Schizophrenia; neuroleptic; diagnostic; neuropsychiatric disorder;
KW neurological disorder; neuropathy; ds.
XX
OS Homo sapiens.
XX
PN WO200163293-A2.
XX
PD 30-AUG-2001.
XX
PF 23-FEB-2001; 2001WO-GB000783.
XX
PR 24-FEB-2000; 2000GB-00004415.
PR 28-DEC-2000; 2000US-00750395.
XX
PA (OXFO-) OXFORD GLYCOSCIENCES UK LTD.
XX
PI Herath HMAC, Parekh RB, Rohlff C;
XX
DR WPI; 2001-502868/55.
DR P-PSDB; AAU15115.
XX
PT Diagnosing and monitoring Schizophrenia by detecting the presence of
PT Schizophrenia Associated Features and Schizophrenia Associated Protein
PT Isoforms in samples of cerebrospinal fluid.
XX
PS Claim 8; Fig 4B; 160pp; English.
XX
CC The invention relates to methods and compositions for screening,
CC diagnosis and prognosis of Schizophrenia. The method involves detecting
CC the presence of Schizophrenia (SCH) Associated Features (SFs) and SCH
CC Associated Protein Isoforms (SPIs) in samples, e.g. by electrophoresis,
CC immunoassay or hybridisation assay, for diagnosing and monitoring SCH,
CC studying the effectiveness of treatments and for identifying potential
CC therapeutic agents. The method is used for (1) screening or diagnosis of
CC SCH and the relative abundance of at least 1 chosen feature correlates
CC with the presence or absence of SCH; and (2) monitoring the effect of
CC therapy administered to a subject with SCH and the relative abundance of
CC at least 1 chosen feature which correlates with the severity of SCH. The
CC expression and activity of the SFs, SPIs and related molecules (e.g.
CC secondary messengers) are studied to diagnose SCH, monitor the progress
CC of the disorder and the effectiveness of treatment and as targets to
CC identify and produce potential therapeutic agents for the treatment of
CC SCH. The paucity of detectable neuralgic defects distinguishes
CC neuropsychiatric disorders such as SCH from neurological disorders, where
CC manifestations of anatomical and biochemical changes have been identified
CC in many cases. Consequently the identification and characterisation of
CC cellular and/or molecular causative defects and neuropathies are
CC necessary for improved treatment of neuropsychiatric disorders. AAS23810-
CC AAS23819 represent the coding sequences of schizophrenia-associated
CC isoforms and PCR primers used in the method of the invention
XX
SQ Sequence 1587 BP; 399 A; 375 C; 418 G; 378 T; 0 U; 17 Other;

Query Match 68.3%; Score 1531.6; DB 5; Length 1587;
Best Local Similarity 99.1%; Pred. No. 0;
Matches 1533; Conservative 0; Mismatches 14; Indels 0; Gaps 0;

```
Qy        225 GCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 284
              ||  | |  |||   |  ||||||||||||||||||||||||||||||||||||||||||||
Db         41 GCGTCTTTGCTGGCTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 100

Qy        285 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
              |||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db        101 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTNCATCAGGATGAA 160

Qy        345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 220

Qy        405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
              |||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        221 CGCTTCAGACAAGAGCTCTTCANAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 280

Qy        465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 340

Qy        525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 400

Qy        585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 460

Qy        645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 520

Qy        705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 580

Qy        765 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 824
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 640

Qy        825 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 884
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 700

Qy        885 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 944
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 760

Qy        945 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 1004
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 820

Qy       1005 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 1064
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 880

Qy       1065 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 1124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 940

Qy       1125 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1184
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1000

Qy       1185 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1244
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1060

Qy       1245 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1304
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1120

Qy       1305 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1364
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1180

Qy       1365 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1424
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1240

Qy       1425 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1484
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1241 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1300

Qy       1485 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1544
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1301 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1360

Qy       1545 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1604
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1361 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1420

Qy       1605 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1664
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1421 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1480

Qy       1665 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAA 1724
                ||||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db       1481 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGATCCATTAA 1540

Qy       1725 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1771
                |||||||||||||||||||||||||||||||||||||||||||||
Db       1541 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1587


RESULT 28
ADO79057
ID   ADO79057 standard; DNA; 1587 BP.
XX
AC   ADO79057;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Schizophrenia-Associated Protein Isoform SPI-238/SPI-240 cDNA.
XX
KW   neuroleptic; Schizophrenia; immunospecific binding;
KW   Schizophrenia-Associated Protein Isoform; SPI; schizophrenia screening;
KW   schizophrenia diagnosing; schizophrenia prognosing;
KW   Schizophrenia treatment; drug development; cerebrospinal fluid; human;
KW   SPI-238; SPI-240; gene; ds.
XX
OS   Homo sapiens.
XX
PN   US2004110938-A1.
XX
PD   10-JUN-2004.
XX
PF   23-FEB-2001; 2001US-00791377.
XX
PR   24-FEB-2000; 2000GB-00044156.
PR   28-DEC-2000; 2000US-00750395.
XX
PA   (PARE/) PAREKH R B.
PA   (HERA/) CHANDRASIRI HERATH H M A.
PA   (ROHL/) ROHLFF C.
PA   (TERR/) TERRETT J A.
PA   (TYSO/) TYSON K L.
XX
PI   Parekh RB,  Chandrasiri Herath HMA,  Rohlff C,  Terrett JA,  Tyson KL;
XX
DR   WPI; 2004-440403/41.
DR   P-PSDB; ADO79057.
XX
PT   New isolated nucleic acid molecule, useful for diagnosing Schizophrenia,
PT   for monitoring the effectiveness of Schizophrenia treatment or for
PT   screening agents for treating Schizophrenia.
XX
PS   Disclosure; SEQ ID NO 675; 170pp; English.
XX
CC   The invention describes an isolated nucleic acid molecule (I) that
CC   hybridises to two short nucleic acid sequences and the 1515 amino acid
CC   sequence fully defined in the specification. Also described are: a
CC   preparation comprising an isolated peptide coded for by the nucleic acid
CC   molecule above, or comprising an isolated human protein comprising one or
CC   more of the following sequences: Glu-Leu-Asp-Val-Leu-Gln-Gly-Arg, and Gly
CC   -Ile-Leu-Ile-Leu-Gly-Gln-Glu-Gln-Asp-Thr-Leu-Gly-Gly-Arg; methods for
CC   diagnosing Schizophrenia; antibodies capable of immunospecific binding to
CC   a Schizophrenia-Associated Protein Isoform (SPI); methods of treating
CC   Schizophrenia; and methods of screening for agents that modulate a
CC   characteristic (e.g., expression or binding activity) of an SPI, an SPI
CC   analogue, or an SPI-related polypeptide. The nucleic acid molecule and
CC   encoded proteins, as well as the methods and compositions are useful for
CC   screening, diagnosing, and prognosing Schizophrenia, for monitoring the
CC   effectiveness of Schizophrenia treatment, for identifying patients most
CC   likely to respond to a particular therapeutic treatment and for
CC   developing drug. They are also useful for screening modulators of
CC   Schizophrenia-Associated Protein Isoform useful for treating
CC   Schizophrenia. This sequence encodes schizophrenia-associated protein
CC   isoform SPI-238/SPI-240 fusion.
XX
SQ   Sequence 1587 BP; 399 A; 375 C; 418 G; 378 T; 0 U; 17 Other;

  Query Match             68.3%;  Score 1531.6;  DB 12;  Length 1587;
  Best Local Similarity   99.1%;  Pred. No. 0;
  Matches 1533;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy        225 GCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 284
                ||  | |  |||    |    ||||||||||||||||||||||||||||||||||||||||||||
Db         41 GCGTCTTTGCTGGCTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCC 100

Qy        285 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAA 344
                |||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||||
Db        101 TCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTNCATCAGGATGAA 160

Qy        345 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 404
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCT 220

Qy        405 CGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 464
                |||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        221 CGCTTCAGACAAGAGCTCTTCANAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTG 280

Qy        465 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 524
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        281 GGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTT 340

Qy        525 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 584
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        341 CCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGC 400

Qy        585 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 644
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        401 TTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCC 460

Qy        645 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 704
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        461 TATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGC 520
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Qy        705 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 764
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        521 CCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCT 580

Qy        765 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 824
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        581 GTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAA 640

Qy        825 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 884
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        641 CTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGAT 700

Qy        885 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 944
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        701 AACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTAC 760

Qy        945 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 1004
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        761 TTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATC 820

Qy       1005 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 1064
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        821 CTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGT 880

Qy       1065 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 1124
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        881 CATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAAT 940

Qy       1125 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1184
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        941 ACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAA 1000

Qy       1185 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1244
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1001 TTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCT 1060

Qy       1245 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1304
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1061 ATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGA 1120

Qy       1305 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1364
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1121 GTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAA 1180

Qy       1365 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1424
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1181 CAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTT 1240

Qy       1425 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1484
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1241 GTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTC 1300

Qy       1485 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1544
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1301 GCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGA 1360

Qy       1545 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1604
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1361 TCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATT 1420

Qy       1605 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1664
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1421 CCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAAC 1480

Qy       1665 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAA 1724
              ||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||
Db       1481 TACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGATCCATTAA 1540

Qy       1725 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1771
              |||||||||||||||||||||||||||||||||||||||||||||
Db       1541 TCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTC 1587
```

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RESULT 29
AAS97191
ID   AAS97191 standard; cDNA; 1524 BP.
XX
AC   AAS97191;
XX
DT   26-FEB-2002  (first entry)
XX
DE   Human metalloprotease partial DNA sequence #20.
XX
KW   Human; protease; PCR primer; cytostatic; immunomodulator; cardiant;
KW   vasotropic; antimigraine; analgesic; endocrine; nootropic; tranquiliser;
KW   hypertensive; hypotensive; neuroleptic; neuroprotective; anabolic;
KW   anorectic; antiinflammatory; aspartyl protease; cysteine protease;
KW   metalloprotease; serine protease; cancer; haematopoietic; breast; colon;
KW   lung; prostrate; cervical; brain; ovarian; bladder; kidney; pain;
KW   immune-related disease; cardiovascular disease; neuronal disease;
KW   migraine; sexual dysfunction; mood disorder; attention disorder;
KW   cognition disorder; hypotension; hypertension; psychotic disorder;
KW   dyskinesia; metabolic disorder; inflammatory disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200183782-A2.
XX
PD   08-NOV-2001.
XX
PF   04-MAY-2001; 2001WO-US014431.
XX
PR   04-MAY-2000; 2000US-0201879P.
XX
PA   (SUGE-) SUGEN INC.
XX
PI   Plowman GD,  Whyte D,  Sudarsanam S,  Manning G,  Caenepeel S;
PI   Payne V;
XX
DR   WPI; 2002-041502/05.
DR   P-PSDB; AAU72908.
XX
PT   Novel protease polypeptide useful for screening for substances that may
PT   be used to treat, e.g., cancers, immune-related diseases, cardiovascular
PT   disease, migraine, pain, psychotic and inflammatory disorders.
XX
PS   Claim 30; Fig 1U-V; 232pp; English.
XX
CC   The invention relates to an isolated, enriched, or purified protease
CC   polypeptide (I) and polynucleotide (II) encoding (I). (I) may be used to
CC   screen for substances (S) that may modulate its activity. Administering S
CC   (which modulates protease activity in vitro) may be used to treat a
CC   disease or disorder selected from cancers (e.g., of tissues, of blood or
CC   haematopoietic origin, of the breast, colon, lung, prostrate, cervical,
CC   brain, ovarian, bladder or kidney), immune-related diseases and
CC   disorders, cardiovascular disease, brain or neuronal-associated diseases
CC   (e.g., central or peripheral nervous system diseases, migraine, pain,
CC   sexual dysfunction, mood disorders, attention disorders, cognition
CC   disorders, hypotension, hypertension, psychotic disorders, neurological
CC   disorders and dyskinesias), metabolic disorders and inflammatory
CC   disorders. (I) may also be useful as a diagnostic tool for a disease or
CC   disorder such as those above. AAS97159-AAS97195 represent human protease
CC   coding sequences and primers of the invention
XX
SQ   Sequence 1524 BP; 386 A; 366 C; 413 G; 359 T; 0 U; 0 Other;

  Query Match             68.0%;  Score 1524;  DB 6;  Length 1524;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 1524;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        201 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTG 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTG 60

Qy        261 GAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAG 320
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Db        61 GAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAG 120

Qy       321 TACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAG 380

Db       121 TACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAG 180

Qy       381 AGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTG 440

Db       181 AGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTG 240

Qy       441 GCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAG 500

Db       241 GCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAG 300

Qy       501 CAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGC 560

Db       301 CAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGC 360

Qy       561 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 620

Db       361 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 420

Qy       621 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 680

Db       421 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 480

Qy       681 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 740

Db       481 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 540

Qy       741 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 800

Db       541 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 600

Qy       801 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGT 860

Db       601 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGT 660

Qy       861 GTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACT 920

Db       661 GTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACT 720

Qy       921 TATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTT 980

Db       721 TATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTT 780

Qy       981 CACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTC 1040

Db       781 CACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTC 840

Qy      1041 GGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTT 1100

Db       841 GGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTT 900

Qy      1101 CCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 1160

Db       901 CCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 960

Qy      1161 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1220

Db       961 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1020

Qy      1221 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1280

Db      1021 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1080

Qy      1281 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1340

Db      1081 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1140

Qy      1341 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1400

Db      1141 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1200

Qy      1401 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1460

Db      1201 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1260

Qy      1461 AATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACA 1520

Db      1261 AATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACA 1320

Qy      1521 GAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATC 1580

Db      1321 GAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATC 1380

Qy      1581 GTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAG 1640

Db      1381 GTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAG 1440

Qy      1641 AATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1700

Db      1441 AATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1500

Qy      1701 TTAGAGATGGCCCAGCTCCATTAA 1724

Db      1501 TTAGAGATGGCCCAGCTCCATTAA 1524
```

RESULT 30
ABL58477
ID ABL58477 standard; cDNA; 1521 BP.
XX
AC ABL58477;
XX
DT 30-JUL-2002 (first entry)
XX
DE Human metalloprotease, 55054 coding sequence.
XX
KW 55054; human; metalloprotease; neural cell; cerebral injury; vulnerary;
KW gene; ss.
XX
OS Homo sapiens.
XX
FH Key   Location/Qualifiers
FT CDS   1. .1521
FT   /*tag= a
FT   /product= "metalloprotease 55054"
XX
PN WO200226948-A2.
XX
PD 04-APR-2002.
XX
PF 25-SEP-2001; 2001WO-US030016.
XX
PR 25-SEP-2000; 2000US-0235055P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Kapeller-Libermann R;
XX
DR WPI; 2002-405051/43.
DR P-PSDB; ABB07950.
XX
PT Identifying modulator of neural cell growth or transition metal
PT neurotoxicity, involves contacting test compound with novel human
PT metalloprotease polypeptide and determining if the polypeptide binds the
PT test compound.
XX
PS Claim 7; Fig 1A-D; 105pp; English.
XX
CC The invention provides a method for identifying a modulator of neural
CC cell growth, cerebral injury or wound healing, transition metal
CC neurotoxicity, histamine production, neural/hepatic cell proliferation or
CC degradation of extracellular matrix, neurotransmitter or soluble

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CC   intracellular/extracellular dipeptide. The method involves contacting a
CC   test compound and metalloprotease polypeptide, selected from a human
CC   metalloprotease polypeptide, termed 55054, and determining if 55054 binds
CC   the test compound. The metalloprotease, 55054 is useful for making a
CC   pharmaceutical composition for inhibiting the ability of a cell selected
CC   from a neural cell such as glial cell or neuron (a sensory neuron or
CC   olfactory sensory neuron), astrocyte, oligodendrocyte and ensheathing
CC   cell, to cleave a polypeptide. The present sequence represents the coding
CC   sequence of the human metalloprotease, 55054
XX
SQ   Sequence 1521 BP; 384 A; 366 C; 413 G; 358 T; 0 U; 0 Other;

  Query Match             67.8%;  Score 1521;  DB 6;  Length 1521;
  Best Local Similarity   100.0%;  Pred. No. 0;
  Matches 1521;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy        201 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTG 260
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTG 60

Qy        261 GAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAG 320
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAG 120

Qy        321 TACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAG 380
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 TACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAG 180

Qy        381 AGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTG 440
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 AGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTG 240

Qy        441 GCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAG 500
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 GCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAG 300

Qy        501 CAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGC 560
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGC 360

Qy        561 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 620
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 420

Qy        621 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 680
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 480

Qy        681 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 740
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 540

Qy        741 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 800
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 600

Qy        801 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGT 860
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        601 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGT 660

Qy        861 GTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACT 920
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        661 GTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACT 720

Qy        921 TATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTT 980
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        721 TATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTT 780

Qy        981 CACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTC 1040
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        781 CACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTC 840

Qy       1041 GGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTT 1100
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        841 GGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTT 900

Qy       1101 CCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 1160
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         901 CCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 960

Qy       1161 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1220
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         961 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1020

Qy       1221 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1280
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1021 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1080

Qy       1281 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1340
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1081 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1140

Qy       1341 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1400
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1141 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1200

Qy       1401 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1460
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1201 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1260

Qy       1461 AATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACA 1520
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1261 AATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACA 1320

Qy       1521 GAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATC 1580
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1321 GAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATC 1380

Qy       1581 GTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAG 1640
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1381 GTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAG 1440

Qy       1641 AATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1700
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        1441 AATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1500

Qy       1701 TTAGAGATGGCCCAGCTCCAT 1721
              |||||||||||||||||||||
Db        1501 TTAGAGATGGCCCAGCTCCAT 1521


RESULT 31
AAH27154
ID   AAH27154 standard; cDNA; 1524 BP.
XX
AC   AAH27154;
XX
DT   08-AUG-2001  (first entry)
XX
DE   Human carnosinase cDNA.
XX
KW   Human; carnosinase; carnosine; anserine; hydrolysis; brain; epilepsy;
KW   Alzheimer's disease; cognitive disorder; development abnormality;
KW   foetal deficiency; neurodegenerative disorder; schizophrenia; ss;
KW   amyotrophic lateral sclerosis; Parkinson's disease; ischaemic shock.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             1. .1524
FT                   /*tag=  a
FT                   /partial
FT                   /product= "Carnosinase"
FT                   /note= "No stop codon given"
XX
PN   EP1097997-A1.
```

XX
PD 09-MAY-2001.
XX
PF 03-NOV-1999; 99EP-00402723.
XX
PR 03-NOV-1999; 99EP-00402723.
XX
PA (SNFI) SANOFI-SYNTHELABO.
XX
PI Saudek V, Smirnova-Robert T, Teufel M;
XX
DR WPI; 2001-319238/34.
DR P-PSDB; AAB97262.
XX
PT Novel isolated human carnosinase polypeptide useful for prevention and/or
PT treatment of Alzheimer's disease, amyotrophic lateral sclerosis,
PT Parkinson's disease, schizophrenia, ischemic shock, and epilepsy.
XX
PS Claim 1; Page 17-19; 27pp; English.
XX
CC The present sequence represents cDNA encoding human carnosinase (see
CC AAB97262). Carnosinase is a glycoprotein with an isoelectric point of
CC 4.4. The active enzyme is a dimer, with the two subunits being connected
CC by at least one disulphide bond. The enzyme is especially active in
CC hydrolysing carnosine and anserine. Carnosinase is found in high
CC concentration in the brain. Homocarnosine is hydrolysed in the brain, and
CC carnosine and anserine are split in the blood stream by carnosinase.
CC Carnosine and anserine are thought to act as cytosol buffering agents.
CC Carnosinase its agonists and antagonists and compositions containing them
CC are useful for the prevention and/or treatment of Alzheimer's disease and
CC cognitive disorders, development abnormalities and foetal deficiencies,
CC neurodegenerative disorders such as amyotrophic lateral sclerosis,
CC Parkinson's disease, schizophrenia, abnormal mental states, ischaemic
CC shock, and epilepsy
XX
SQ Sequence 1524 BP; 384 A; 366 C; 414 G; 360 T; 0 U; 0 Other;

Query Match 67.2%; Score 1506.4; DB 4; Length 1524;
Best Local Similarity 99.7%; Pred. No. 0;
Matches 1520; Conservative 0; Mismatches 1; Indels 3; Gaps 1;

```
Qy      201 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTG---TGCTGCTGCTGCTG 257
            ||||||||||||||||||||||||||||||||||||||||||   |||||||||||||||
Db        1 ATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTG 60

Qy      258 CTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTC 317
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       61 CTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTC 120

Qy      318 CAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATC 377
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      121 CAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATC 180

Qy      378 GAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCC 437
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      181 GAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCC 240

Qy      438 GTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCT 497
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      241 GTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCT 300

Qy      498 CAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGG 557
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      301 CAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGG 360

Qy      558 AGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGAC 617
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      361 AGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGAC 420

Qy      618 CGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTAT 677
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      421 CGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTAT 480

Qy      678 GGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCC 737
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      481 GGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCC 540

Qy      738 TTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAA 797
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      541 TTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAA 600

Qy      798 GAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCT 857
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      601 GAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCT 660

Qy      858 GGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATC 917
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      661 GGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATC 720

Qy      918 ACTTATGGAACCCGGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGAT 977
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      721 ACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGAT 780

Qy      978 TTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTT 1037
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Db      781 TTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTT 840

Qy     1038 CTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTG 1097
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      841 CTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTG 900

Qy     1098 GTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAA 1157
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Db      901 GTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAA 960

Qy     1158 TACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATG 1217
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Db      961 TACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATG 1020

Qy     1218 CACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCT 1277
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1021 CACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCT 1080

Qy     1278 GGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCT 1337
            ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     1081 GGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCT 1140

Qy     1338 CACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCC 1397
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Db     1141 CACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCC 1200

Qy     1398 AAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATT 1457
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Db     1201 AAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATT 1260

Qy     1458 GCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGA 1517
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Db     1261 GCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGA 1320

Qy     1518 ACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAG 1577
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Db     1321 ACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAG 1380

Qy     1578 ATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCG 1637
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Db     1381 ATCGTCCACAAGAGCGTGGTGCTAATTCCGTTGGGAGCTGTTGATGATGGAGAACATTCG 1440

Qy     1638 CAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTT 1697
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Db     1441 CAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTT 1500

Qy     1698 TTCTTAGAGATGGCCCAGCTCCAT 1721
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Db     1501 TTCTTAGAGATGGCCCAGCTCCAT 1524
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RESULT 32
AAI61091/c
ID   AAI61091 standard; cDNA; 1569 BP.
XX
AC   AAI61091;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 5080.
XX
KW   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW   peripheral nervous system; neuropathy; central nervous system; CNS;
KW   Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW   amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW   chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW   leukaemia; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153312-A1.
XX
PD   26-JUL-2001.
XX
PF   26-DEC-2000; 2000WO-US034263.
XX
PR   23-DEC-1999;   99US-00471275.
PR   21-JAN-2000; 2000US-00488725.
PR   25-APR-2000; 2000US-00552317.
PR   20-JUN-2000; 2000US-00598042.
PR   19-JUL-2000; 2000US-00620312.
PR   03-AUG-2000; 2000US-00653450.
PR   14-SEP-2000; 2000US-00662191.
PR   19-OCT-2000; 2000US-00693036.
PR   29-NOV-2000; 2000US-00727344.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Asundi V,  Chen R,  Ma Y,  Qian XB,  Ren F,  Wang D;
PI   Wang J,  Wang Z,  Wehrman T,  Xu C,  Xue AJ,  Yang Y,  Zhang J,  Zhao QA;
PI   Zhou P,  Goodrich R,  Drmanac RT;
XX
DR   WPI; 2001-442253/47.
DR   P-PSDB; AAM41935.
XX
PT   Novel nucleic acids and polypeptides, useful for treating disorders such
PT   as central nervous system injuries.
XX
PS   Claim 1; SEQ ID NO 5080; 10078pp; English.
XX
CC   The invention relates to human nucleic acids (AAI57798-AAI61369) and the
CC   encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC   immunosuppressant and cytostatic activity. The polynucleotides are useful
CC   in gene therapy. A composition containing a polypeptide or polynucleotide
CC   of the invention may be used to treat diseases of the peripheral nervous
CC   system, such as peripheral nervous injuries, peripheral neuropathy and
CC   localised neuropathies and central nervous system diseases, such as
CC   Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC   lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC   utilisation of the activities such as: Immune system suppression,
CC   Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC   assays for receptor activity, arthritis and inflammation, leukaemias and
CC   C.N.S disorders. Note: The sequence data for this patent did not form
CC   part of the printed specification
XX
SQ   Sequence 1569 BP; 411 A; 343 C; 356 G; 459 T; 0 U; 0 Other;

  Query Match           64.9%;  Score 1454.8;  DB 4;  Length 1569;
  Best Local Similarity  97.7%;  Pred. No. 5.2e-309;
  Matches 1507;  Conservative    0;  Mismatches   33;  Indels    3;  Gaps    3;

Qy       672 CTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTG 731
                || || || | | ||||||||  ||  | || || || || ||||||||||||||||||||

Db      1543 CTCTACGGTCTAAGAGCGACCTGCATGAGAGACCTTGACTGGGCTTGGATCAATGCTGTG 1484

Qy       732 AGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGG 791
             ||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1483 AGCGCCTTCAAAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGG 1424

Qy       792 ATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTC 851
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1423 ATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTC 1364

Qy       852 TTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCA 911
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1363 TTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCA 1304

Qy       912 GCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGAC 971
             |||||||||| ||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1303 GCAATCACTTACGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGAC 1244

Qy       972 CAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTT 1031
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Db      1243 CAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTT 1184

Qy      1032 GCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGAT 1091
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Db      1183 GCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGAT 1124

Qy      1092 GAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTA 1151
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1123 GAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTA 1064

Qy      1152 GAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATT 1211
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1063 GAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATT 1004

Qy      1212 CTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGAT 1271
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db      1003 CTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGAT 944

Qy      1272 GAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTA 1331
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       943 GAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTA 884

Qy      1332 GTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTG 1391
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       883 GTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTG 824

Qy      1392 TTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCG 1451
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       823 TTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCG 764

Qy      1452 TGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTG 1511
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       763 TGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTG 704

Qy      1512 TTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTC 1571
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Db       703 TTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTC 644

Qy      1572 CAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAA 1631
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       643 CAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAA 584

Qy      1632 CATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCT 1691
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Db       583 CATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCT 524

Qy      1692 GCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGA 1751
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||

Db       523 GCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGA 464

Qy      1752 TCCACTGACAGATTCACCT-CCCCCACATCCCTAGACAGGGATGGAATGTAAATAT-CCA 1809
             ||||||||||||||||||| |||||||||||||||||||||||||||||||||| ||| |||

Db       463 TCCACTGACAGATTCACCTCCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCCA 404
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Qy       1810 GAGAATTTGGGTCTAGTATAGTACATTTTCCCTT-CCATTTAAAATGTCTTGGGATATCT 1868
             |||||||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        403 GAGAATTTGGGTCTAGTATAGTACATTTTCCCTTCCCATTTAAAATGTCTTGGGATATCT 344

Qy       1869 GGATCAGTAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACT 1928
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        343 GGATCAGTAATAAAATATTTCAAAGGCACAGATGTTGGAAATGGTTTAAGGTCCCCCACT 284

Qy       1929 GCACACCTTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAA 1988
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        283 GCACACCTTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGTCCTGTGCAA 224

Qy       1989 TAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATT 2048
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        223 TAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATT 164

Qy       2049 GGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCC 2108
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        163 GGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCC 104

Qy       2109 ATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGG 2168
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        103 ATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGG 44

Qy       2169 TCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAA 2211
             ||||||           || | ||||  | ||||||||||||
Db         43 TCTCCAAAGAAAAAAAAAAACACAAAAGGACAAAAAAAAAAA 1
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RESULT 33
AAI59305

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ID   AAI59305 standard; cDNA; 1343 BP.
XX
AC   AAI59305;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 1508.
XX
KW   Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW   peripheral nervous system; neuropathy; central nervous system; CNS;
KW   Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW   amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW   chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW   leukaemia; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153312-A1.
XX
PD   26-JUL-2001.
XX
PF   26-DEC-2000; 2000WO-US034263.
XX
PR   23-DEC-1999;   99US-00471275.
PR   21-JAN-2000; 2000US-00488725.
PR   25-APR-2000; 2000US-00552317.
PR   20-JUN-2000; 2000US-00598042.
PR   19-JUL-2000; 2000US-00620312.
PR   03-AUG-2000; 2000US-00653450.
PR   14-SEP-2000; 2000US-00662191.
PR   19-OCT-2000; 2000US-00693036.
PR   29-NOV-2000; 2000US-00727344.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Asundi V,  Chen R,  Ma Y,  Qian XB,  Ren F,  Wang D;
PI   Wang J,  Wang Z,  Wehrman T,  Xu C,  Xue AJ,  Yang Y,  Zhang J,  Zhao QA;
PI   Zhou P,  Goodrich R,  Drmanac RT;
XX
DR   WPI; 2001-442253/47.
DR   P-PSDB; AAM40149.
XX
PT   Novel nucleic acids and polypeptides, useful for treating disorders such
PT   as central nervous system injuries.
XX
PS   Claim 1; SEQ ID NO 1508; 10078pp; English.
XX
CC   The invention relates to human nucleic acids (AAI57798-AAI61369) and the
CC   encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC   immunosuppressant and cytostatic activity. The polynucleotides are useful
CC   in gene therapy. A composition containing a polypeptide or polynucleotide
CC   of the invention may be used to treat diseases of the peripheral nervous
CC   system, such as peripheral nervous injuries, peripheral neuropathy and
CC   localised neuropathies and central nervous system diseases, such as
CC   Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC   lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC   utilisation of the activities such as: Immune system suppression,
CC   Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC   assays for receptor activity, arthritis and inflammation, leukaemias and
CC   C.N.S disorders. Note: The sequence data for this patent did not form
CC   part of the printed specification
XX
SQ   Sequence 1343 BP; 389 A; 297 C; 323 G; 331 T; 0 U; 3 Other;
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Query Match 53.7%; Score 1203.4; DB 4; Length 1343;
Best Local Similarity 98.7%; Pred. No. 7.1e-254;
Matches 1213; Conservative 0; Mismatches 16; Indels 0; Gaps 0;

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Qy        672 CTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTG 731
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Db        109 CTCTACGGTCTAAGAGCGACCTGCATGAGAGACCTTGACTGGGCTTGGATCAATGCTGTG 168

Qy        732 AGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGG 791
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Db        169 AGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGG 228

Qy        792 ATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTC 851
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Db        229 ATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTC 288

Qy        852 TTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCA 911
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        289 TTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCA 348

Qy        912 GCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGAC 971
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        349 GCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGAC 408

Qy        972 CAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTT 1031
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        409 CAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTT 468

Qy       1032 GCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGAT 1091
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        469 GCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGAT 528

Qy       1092 GAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTA 1151
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        529 GAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTA 588

Qy       1152 GAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATT 1211
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        589 GAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATT 648

Qy       1212 CTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGAT 1271
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        649 CTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGAT 708

Qy       1272 GAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTA 1331
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        709 GAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTA 768

Qy       1332 GTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTG 1391
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                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        769 GTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTG 828

Qy       1392 TTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCG 1451
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        829 TTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCG 888

Qy       1452 TGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTG 1511
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        889 TGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTG 948

Qy       1512 TTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTC 1571
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        949 TTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTC 1008

Qy       1572 CAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAA 1631
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1009 CAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAA 1068

Qy       1632 CATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCT 1691
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1069 CATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCT 1128

Qy       1692 GCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGA 1751
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1129 GCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGA 1188

Qy       1752 TCCACTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGA 1811
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1189 TCCACTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGA 1248

Qy       1812 GAATTTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGA 1871
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1249 GAATTTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGA 1308

Qy       1872 TCAGTAATAAAATATTTCAAAGGCACAGA 1900
                |||||||||||||||||||||||| | |
Db       1309 TCAGTAATAAAATATTTCAAAGGCAAAAA 1337
```

RESULT 34
ADF90810/c
ID ADF90810 standard; DNA; 742 BP.
XX
AC ADF90810;
XX
DT 26-FEB-2004 (first entry)
XX
DE Human hepatic-fibrosis disease marker SEQ ID 272.
XX
KW Hepatic fibrosis; marker; chronic hepatitis; liver cirrhosis;
KW hepatic carcinoma; human; ds.
XX
OS Homo sapiens.
XX
PN JP2003259877-A.
XX
PD 16-SEP-2003.
XX
PF 11-MAR-2002; 2002JP-00065013.
XX
PR 11-MAR-2002; 2002JP-00065013.
XX
PA (SUMU) SUMITOMO SEIYAKU KK.
XX
DR WPI; 2003-821598/77.
XX
PT Hepatic fibrosis disease markers comprising polynucleotides or
PT antibodies, useful for improved diagnosis, screening and developing drugs
PT to treat hepatitis, to control cirrhosis and carcinoma.
XX
PS Claim 1; SEQ ID NO 272; 313pp; Japanese.
XX
CC The present invention relates to hepatic-fibrosis disease markers
CC (ADF90539-ADF90871) and related proteins (ADF90872-ADF90917). The
CC sequences are useful for detecting and treating hepatic fibrosis caused
CC by alcohol consumption, virus infection, etc., and the associated chronic
CC hepatitis, etc. leading to liver cirrhosis and hepatic carcinoma. The
CC markers allow the cause of hepatic fibrosis to be clarified (diagnostic
CC precision), so more suitable treatments can be developed and given.
XX
SQ Sequence 742 BP; 192 A; 165 C; 160 G; 224 T; 0 U; 1 Other;

  Query Match   32.4%; Score 726.6; DB 10; Length 742;
  Best Local Similarity 98.7%; Pred. No. 2.4e-149;
  Matches 732; Conservative   0; Mismatches   10; Indels   0; Gaps   0;

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Qy       1155 GAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTA 1214
                |||||||||| || |||||||| |||||||||||||||||||||| |  ||| ||||||
Db        742 GAATACCGGATTACCAGCCGGGGTGAGAAATTTCTGTTCGATACTAGGAGGGANATTCTA 683

Qy       1215 ATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAG 1274
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        682 ATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAG 623

Qy       1275 CCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTC 1334
                |||| |||||||  ||||||||||||||||||||||||||||||||||||||||||||||||
Db        622 CCTGAAACTAAACCAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTC 563

Qy       1335 CCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTC 1394
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        562 CCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTC 503

Qy       1395 TCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGG 1454
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        502 TCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGG 443

Qy       1455 ATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTT 1514
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        442 ATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTT 383

Qy       1515 GGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAG 1574
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        382 GGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAG 323

Qy       1575 GAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACAT 1634
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        322 GAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACAT 263

Qy       1635 TCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCC 1694
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        262 TCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCC 203

Qy       1695 TTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCC 1754
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        202 TTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCC 143

Qy       1755 ACTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAA 1814
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        142 ACTGACAGATTCACCTCCCCCACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAA 83

Qy       1815 TTTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCA 1874
                |||||||||||||||||||||||||||||||||||||||||||||||||| ||||||||||
Db          82 TTTGGGTCTAGTATAGTACATTTTCCCTTCCATTTAAAATGTCTTGGGACATCTGGATCA 23

Qy       1875 GTAATAAAATATTTCAAAGGCA 1896
                |||||||||||||||||||||
Db          22 GTAATAAAATATTTCAAAGGCA 1
```

RESULT 35
AAH98942
ID AAH98942 standard; cDNA; 639 BP.
XX
AC AAH98942;
XX

```
DT   12-OCT-2001  (first entry)
XX
DE   Human EST-derived coding sequence SEQ ID NO: 799.
XX
KW   Human; sheep; pig; cow; fruit fly; yeast; hamster; macaque; horse;
KW   tomato; monkey; dog; sea urchin; expressed sequence tag; EST;
KW   diagnostics; forensic test; gene mapping; genetic disorder; biodiversity;
KW   gene therapy; nutrition; ss.
XX
OS   Homo sapiens.
XX
PN   WO200154477-A2.
XX
PD   02-AUG-2001.
XX
PF   25-JAN-2001; 2001WO-US002687.
XX
PR   25-JAN-2000; 2000US-00491404.
PR   17-JUL-2000; 2000US-00617746.
PR   03-AUG-2000; 2000US-00631451.
PR   15-SEP-2000; 2000US-00663870.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Zhou P,  Qian XB,  Wang Z,  Chen R,  Asundi V;
PI   Cao Y,  Drmanac RA,  Zhang J,  Werhman T;
XX
DR   WPI; 2001-476164/51.
DR   P-PSDB; AAM24283.
XX
PT   Isolated polypeptide for treatment of diseases, diagnostics, raising
PT   antibodies and research use.
XX
PS   Claim 1; Page 676; 1275pp; English.
XX
CC   The present invention provides the protein and coding sequences of novel
CC   proteins from a variety of organisms, including human, dog, cat, horse,
CC   cow, pig, hamster, monkey, macaque, yeast, bacteria, fruit fly, sea
CC   urchin and tomato. These were derived from expressed sequence tags (ESTs)
CC   from the organism of interest. They can be used in diagnostics,
CC   forensics, gene mapping, identification of mutations, to assess
CC   biodiversity and for nutritional purposes. The present sequence is a cDNA
CC   of the invention
XX
SQ   Sequence 639 BP; 119 A; 181 C; 186 G; 153 T; 0 U; 0 Other;

  Query Match          24.9%;  Score 557.2;  DB 4;  Length 639;
  Best Local Similarity   99.0%;  Pred. No. 3.3e-112;
  Matches  572;  Conservative    0;  Mismatches    3;  Indels    3;  Gaps    1;

Qy          1 GAATGAATACCTCCGAAGCCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCC 60
              ||||||||||||||||||| |||||||||| ||| ||||||||||||||||||||||
Db         61 GAATGAATACCTCCGAAGCCGTTTTGTTCTCCAAATGGGAATAGCTCCACTATACCAGCC 120

Qy         61 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 180

Qy        121 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 240

Qy        181 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 300

Qy        241 CTG---TGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 297
              |||   ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 360

Qy        298 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 357
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 420

Qy        358 TGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAG 417
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 TGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAG 480

Qy        418 AGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGG 477
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 AGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGG 540

Qy        478 CCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCG 537
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 CCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCG 600

Qy        538 TCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGC 575
              |||||||||||||||||||||||||||||||||||||
Db        601 TCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGC 638


RESULT 36
AAH99853
ID   AAH99853 standard; cDNA; 639 BP.
XX
AC   AAH99853;
XX
DT   16-OCT-2001  (first entry)
XX
DE   Human protein encoding cDNA sequence SEQ ID NO:688.
XX
KW   Human; cancer; ulcer; HIV infection; human immunodeficiency virus;
KW   antiinflammatory; antirheumatic; antiarthritic; immunosuppressive;
KW   antibacterial; endocrine; cardiant; central nervous system; virucide;
KW   anti-HIV; fungicide; antimutagen; cardiovascular; antianaemic; anaemia;
KW   antiaggregant; haemostatic; vulnerary; antiulcer; osteopathic; eczema;
KW   dermatological; antiallergic; antiasthmatic; antidiabetic; cytostatic;
KW   neuroprotective; antidepressant; nootropic; antiparkinsonian; infection;
KW   immunostimulant; gene therapy; antisense therapy; vaccine; inflammation;
KW   antianaphylactic; rheumatoid arthritis; septic shock; pancreatitis;
KW   cardiac dysfunction; neuropathology; cardiac anaphylaxis; autoimmunity;
KW   genetic disease; haematopoietic disorder; platelet disorder; asthma;
KW   thrombocytopaenia; osteoporosis; severe combined immunodeficiency;
KW   allergic rhinitis; diabetes; multiple sclerosis; depression;
KW   Alzheimer's disease; Parkinson's disease; neurodegenerative disorder;
KW   neurological disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200153455-A2.
XX
PD   26-JUL-2001.
XX
PF   22-DEC-2000; 2000WO-US035017.
XX
PR   23-DEC-1999;   99US-00471275.
PR   21-JAN-2000; 2000US-00488725.
PR   25-APR-2000; 2000US-00552317.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-457603/49.
DR   P-PSDB; AAM25912.
XX
PT   Isolated human polynucleotides encoding polypeptides, useful for the
PT   treatment and diagnosis of e.g. cancer, ulcers and HIV infection.
XX
PS   Claim 1; Page 683; 1217pp; English.
XX
CC   AAH99166 to AAH99904 encode the human proteins given in AAM25225 to
CC   AAM25963. The proteins can have activities based on the tissues and cells
CC   they are expressed in, such as: antiinflammatory; antirheumatic;
CC   antiarthritic; immunosuppressive; antibacterial; endocrine; cardiant;
CC   central nervous system; virucide; anti-HIV; fungicide; antimutagen;
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CC   cardiovascular; antianaemic; antiaggregant; haemostatic; vulnerary;
CC   antiulcer; osteopathic; dermatological; antiallergic; antiasthmatic;
CC   antidiabetic; cytostatic; neuroprotective; antidepressant; nootropic;
CC   antiparkinsonian; and immunostimulant. The proteins and polynucleotides
CC   encoding them can be used in gene therapy, antisense therapy and vaccine
CC   production, The proteins and polynucleotides are useful for screening for
CC   agonists or antagonists of a protein and for the treatment and diagnosis
CC   of disorders associated with the activity of a protein e.g. inflammation,
CC   rheumatoid arthritis, septic shock, pancreatitis, cardiac dysfunction,
CC   neuropathology, cardiac anaphylaxis, viral, bacterial, HIV and fungal
CC   infections, autoimmunity, genetic diseases, haematopoietic disorders,
CC   anaemia, platelet disorders, thrombocytopaenia, wounds, burns, ulcers,
CC   osteoporosis, severe combined immunodeficiency, eczema, allergic
CC   rhinitis, asthma, diabetes, cancer, multiple sclerosis, depression,
CC   Alzheimer's disease, Parkinson's disease, neurodegenerative and
CC   neurological disorders
XX
SQ   Sequence 639 BP; 119 A; 181 C; 186 G; 153 T; 0 U; 0 Other;

  Query Match             24.9%;  Score 557.2;  DB 4;  Length 639;
  Best Local Similarity   99.0%;  Pred. No. 3.3e-112;
  Matches  572;  Conservative    0;  Mismatches    3;  Indels    3;  Gaps    1;

Qy          1 GAATGAATACCTCCGAAGCCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCC 60
              |||||||||||||||||||| |||||||||| ||| ||||||||||||||||||||||
Db         61 GAATGAATACCTCCGAAGCCGTTTTGTTCTCCAAATGGGAATAGCTCCACTATACCAGCC 120

Qy         61 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 180

Qy        121 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 240

Qy        181 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 300

Qy        241 CTG---TGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 297
              |||   ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 360

Qy        298 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 357
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 420

Qy        358 TGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAG 417
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        421 TGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAG 480

Qy        418 AGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGG 477
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        481 AGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGG 540

Qy        478 CCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCG 537
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 CCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCG 600

Qy        538 TCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGC 575
              |||||||||||||||||||||||||||||||||||||||
Db        601 TCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGC 638


RESULT 37
ADQ67289
ID   ADQ67289 standard; cDNA; 3755 BP.
XX
AC   ADQ67289;
XX
DT   07-OCT-2004  (first entry)
XX
DE   Novel human cDNA sequence #2262.
XX
KW   ss; gene; osteopathic; neuroprotective; nootropic; antiparkinsonian;
KW   cytostatic; gene therapy; diagnostic marker; morbid state; osteoporosis;
KW   neurological disease; Alzheimer's disease; Parkinson's disease; dementia;
KW   cancer.
XX
OS   Homo sapiens.
XX
PN   EP1440981-A2.
XX
PD   28-JUL-2004.
XX
PF   21-JAN-2004; 2004EP-00001196.
XX
PR   21-JAN-2003; 2003JP-00102206.
PR   09-MAY-2003; 2003JP-00131392.
XX
PA   (REAS-) RES ASSOC BIOTECHNOLOGY.
XX
PI   Isogai T,  Sugiyama T,  Otsuki T,  Wakamatsu A,  Sato H,  Ishii S;
PI   Yamamoto J,  Isono Y,  Nagai K,  Irie R;
XX
DR   WPI; 2004-535376/52.
DR   P-PSDB; ADQ67596.
XX
PT   Novel 2495 cDNA, useful for treating osteoporosis, neurological diseases,
PT   Alzheimer's diseases, Parkinson's diseases, dementia and various cancers.
XX
PS   Claim 1; SEQ ID NO 4450; 2449pp; English.
XX
CC   The invention relates to 2495 novel polynucleotides (I) and their encoded
CC   polypeptides, sequences hybridizing to these nucleotides, sequences
CC   encoding partial polypeptides and sequences having 70% or 90% identity to
CC   the nucleotide and protein sequences. The nucleotides and polypeptides
CC   are useful as diagnostic markers or therapeutic target for the diseases
CC   or morbid states. They are also useful for treating osteoporosis,
CC   neurological diseases, Alzheimer's diseases, Parkinson's diseases,
CC   dementia and various cancers. This sequence corresponds to a nucleotide
CC   sequence of the invention.
XX
SQ   Sequence 3755 BP; 1026 A; 838 C; 804 G; 1087 T; 0 U; 0 Other;

  Query Match             23.1%;  Score 518;  DB 12;  Length 3755;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-103;
  Matches  518;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1656 AGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAG 1715
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3238 AGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAG 3297

Qy       1716 CTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCC 1775
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3298 CTCCATTAATCACAAGAACCTTCTAGTCTGATCTGATCCACTGACAGATTCACCTCCCCC 3357

Qy       1776 ACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAATTTGGGTCTAGTATAGTACAT 1835
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3358 ACATCCCTAGACAGGGATGGAATGTAAATATCCAGAGAATTTGGGTCTAGTATAGTACAT 3417

Qy       1836 TTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAGTAATAAAATATTTCAAAGGC 1895
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3418 TTTCCCTTCCATTTAAAATGTCTTGGGATATCTGGATCAGTAATAAAATATTTCAAAGGC 3477

Qy       1896 ACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCT 1955
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3478 ACAGATGTTGGAAATGGTTTAAGGTCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCT 3537

Qy       1956 TGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAAC 2015
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3538 TGCAGCAACTTGATTTCCCCAAGTCCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAAC 3597

Qy       2016 CTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTA 2075
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3598 CTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTA 3657
```

```
Qy       2076 GGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCAC 2135
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3658 GGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCAC 3717

Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCC 2173
              |||||||||||||||||||||||||||||||||||||
Db       3718 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCC 3755


RESULT 38
AAS65841
ID   AAS65841 standard; cDNA; 643 BP.
XX
AC   AAS65841;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #1645.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG01654.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 1645; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 643 BP; 123 A; 181 C; 186 G; 153 T; 0 U; 0 Other;

  Query Match             23.0%;  Score 514.6;  DB 5;  Length 643;
  Best Local Similarity   97.3%;  Pred. No. 7.4e-103;
  Matches  567;  Conservative    0;  Mismatches    9;  Indels    7;  Gaps    4;

Qy          1 GAATGAATACCTCCGAAGCCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCC 60
              ||||||||||||||||||||| |||||||||| ||| ||||||||||||||||||||||
Db         61 GAATGAATACCTCCGAAGCCGTTTTGTTCTCCAAATGGGAATAGCTCCACTATACCAGCC 120

Qy         61 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 120
              |||  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 TCGGTTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 180

Qy        121 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 180
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        181 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 240

Qy        181 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 240
              |||||||  |||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 GGCTTCAAAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 300

Qy        241 CTG---TGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 297
              |||   ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CTGTGCTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGG 360

Qy        298 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 357
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        361 CGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGC 420

Qy        358 TGAAGGAGTGGGTGGCCATCGAG-AGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAA 416
              |||||||||||||||||||||| ||||||||||||||||||||||||||||||||||||
Db        421 TGAAGGAGTGGGTGGCCATCGAGAAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAA 480

Qy        417 GAGCTCTTCAGAATGATGGCCGTGGCTGC-GGACACGCTGCAGCGCCT--GGGGGCCCGT 473
              |||||||||| |||||||||||||||||| |||||||||||| |||||  ||||||||||
Db        481 GAGCTCTTCAAAATGATGGCCGTGGCTGCGGGACACGCTGCACCGCCTGGGGGGGCCCGT 540

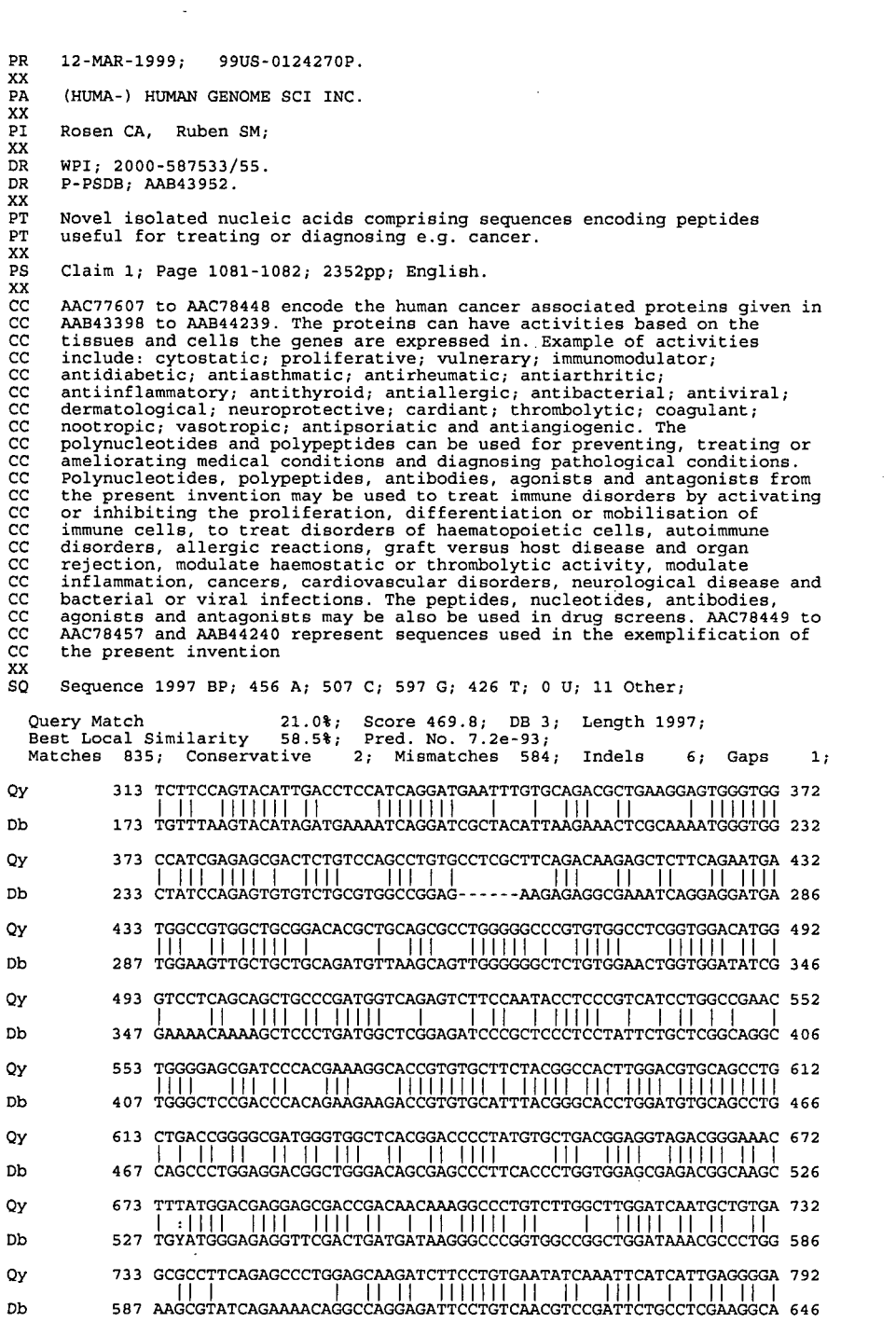
Qy        474 GTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCT 533
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        541 TTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCT 600

Qy        534 CCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCA 576
              |||||||||||||||||||||||||||||||||||||||||||
Db        601 CCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCA 643


RESULT 39
AAC78161
ID   AAC78161 standard; cDNA; 1997 BP.
XX
AC   AAC78161;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human cancer associated gene sequence SEQ ID NO:555.
XX
KW   Human; cancer associated gene; cancer antigen; detection; cancer;
KW   diagnosis; cytostatic; proliferative; vulnerary; immunomodulator;
KW   antidiabetic; antiasthmatic; antirheumatic; antiarthritic; antiviral;
KW   antiinflammatory; antithyroid; antiallergic; antibacterial; cardiant;
KW   dermatological; neuroprotective; thrombolytic; coagulant; nootropic;
KW   vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation;
KW   immune disorder; haematopoietic cell disorder; autoimmune disorder;
KW   allergic reaction; graft versus host disease; organ rejection;
KW   haemostatic; thrombolytic; cardiovascular disorder; infection;
KW   neurological disease; drug screening; ss.
XX
OS   Homo sapiens.
XX
PN   WO200055350-A1.
XX
PD   21-SEP-2000.
XX
PF   08-MAR-2000; 2000WO-US005882.
XX
```

PR 12-MAR-1999; 99US-0124270P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2000-587533/55.
DR P-PSDB; AAB43952.
XX
PT Novel isolated nucleic acids comprising sequences encoding peptides
PT useful for treating or diagnosing e.g. cancer.
XX
PS Claim 1; Page 1081-1082; 2352pp; English.
XX
CC AAC77607 to AAC78448 encode the human cancer associated proteins given in
CC AAB43398 to AAB44239. The proteins can have activities based on the
CC tissues and cells the genes are expressed in. Example of activities
CC include: cytostatic; proliferative; vulnerary; immunomodulator;
CC antidiabetic; antiasthmatic; antirheumatic; antiarthritic;
CC antiinflammatory; antithyroid; antiallergic; antibacterial; antiviral;
CC dermatological; neuroprotective; cardiant; thrombolytic; coagulant;
CC nootropic; vasotropic; antipsoriatic and antiangiogenic. The
CC polynucleotides and polypeptides can be used for preventing, treating or
CC ameliorating medical conditions and diagnosing pathological conditions.
CC Polynucleotides, polypeptides, antibodies, agonists and antagonists from
CC the present invention may be used to treat immune disorders by activating
CC or inhibiting the proliferation, differentiation or mobilisation of
CC immune cells, to treat disorders of haematopoietic cells, autoimmune
CC disorders, allergic reactions, graft versus host disease and organ
CC rejection, modulate haemostatic or thrombolytic activity, modulate
CC inflammation, cancers, cardiovascular disorders, neurological disease and
CC bacterial or viral infections. The peptides, nucleotides, antibodies,
CC agonists and antagonists may be also be used in drug screens. AAC78449 to
CC AAC78457 and AAB44240 represent sequences used in the exemplification of
CC the present invention
XX
SQ Sequence 1997 BP; 456 A; 507 C; 597 G; 426 T; 0 U; 11 Other;

Query Match 21.0%; Score 469.8; DB 3; Length 1997;
Best Local Similarity 58.5%; Pred. No. 7.2e-93;
Matches 835; Conservative 2; Mismatches 584; Indels 6; Gaps 1;



RESULT 40
AAS03019
ID AAS03019 standard; cDNA; 1879 BP.
XX
AC AAS03019;
XX
DT 29-AUG-2001 (first entry)

XX
DE Human diagnostic and therapeutic (dithp) cDNA sequence #8.
XX
KW Human diagnostic and therapeutic molecule; dithp; gene therapy;
KW thalassemia; cardiovascular disorder; cell proliferative disorder;
KW cancer; neurodegenerative disorder; autoimmune disorder; enzyme;
KW infectious disorder; inflammatory disorder; developmental disorder;
KW Incyte ID number 9970897dec; ss.
XX
OS Homo sapiens.
XX
PN WO200121836-A2.
XX
PD 29-MAR-2001.
XX
PF 19-SEP-2000; 2000WO-US025643.
XX
PR 23-SEP-1999; 99US-0155760P.
PR 24-SEP-1999; 99US-0155939P.
PR 24-SEP-1999; 99US-0156294P.
PR 28-SEP-1999; 99US-0156565P.
PR 28-SEP-1999; 99US-0156624P.
PR 28-SEP-1999; 99US-0156625P.
PR 24-NOV-1999; 99US-0167410P.
PR 24-NOV-1999; 99US-0167517P.
PR 24-NOV-1999; 99US-0167520P.
PR 24-NOV-1999; 99US-0167521P.
PR 24-NOV-1999; 99US-0167522P.
PR 24-NOV-1999; 99US-0167542P.
PR 24-NOV-1999; 99US-0167543P.
PR 29-NOV-1999; 99US-0167943P.
PR 29-NOV-1999; 99US-0167945P.
PR 30-NOV-1999; 99US-0168197P.
PR 30-NOV-1999; 99US-0168265P.
PR 30-NOV-1999; 99US-0168429P.
PR 30-NOV-1999; 99US-0168432P.
PR 01-DEC-1999; 99US-0168468P.
PR 01-DEC-1999; 99US-0168599P.
PR 02-DEC-1999; 99US-0168611P.
PR 02-DEC-1999; 99US-0168613P.
PR 02-DEC-1999; 99US-0168857P.
XX
PA (INCY-) INCYTE GENOMICS INC.
XX
PI Hodgson DM, Lincoln SE, Russo FD, Spiro PA, Banville SC;
PI Bratcher SR, Dufour GE, Cohen HJ, Rosen BH, Shah P, Chalup MS;
PI Hillman JL, Jones AL, Yu JY, Greenawalt LB, Panzer SR, Roseberry AM;
PI Wright RJ, Chen W, Liu TF, Yap PE, Stockdreher TK, Amshey S;
PI Fong WT;
XX
DR WPI; 2001-281607/29.
XX
PT Novel diagnostic and therapeutic polynucleotides, used in disease
PT diagnosis and for gene therapy of conditions such as cancer and
PT thalassemia.
XX
PS Claim 1; Page 255; 299pp; English.
XX
CC The present sequence for human diagnostic and therapeutic (dithp) cDNA
CC sequence #8 is 1 of 71 (AAS03012-AAS03082) novel sequences described in
CC the invention. The present sequence (Incyte ID No: 9970897dec) encodes an
CC enzyme molecule. The dithp polynucleotides may be used to diagnose a
CC condition disease or disorder associated with human molecules. They can
CC be used to identify the presence of similar nucleic acids. Dithp
CC polynucleotides may used to generate hybridisation probes for use in
CC chromosomal mapping. Polypeptides (DITHP) encoded by dithp are used to
CC screen for molecules which bind to them and modulate their activity.
CC Dithp polynucleotides can be used for gene therapy of disorders such as
CC severe combined immunodeficiency syndrome (SCID), cystic fibrosis,
CC thalassemia, haemophilia resulting from Factor VIII or IX deficiencies,
CC cardiovascular disorders e.g familial hypercholesterolaemia (FH), cell
CC proliferative disorders e.g. cancers, neurodegenerative disorders,
CC autoimmune/inflammatory disorders, infectious disorders and developmental
CC disorders. The antibodies can be used to analyse protein expression
CC levels
XX
SQ Sequence 1879 BP; 432 A; 487 C; 562 G; 398 T; 0 U; 0 Other;

Query Match 20.9%; Score 469.4; DB 4; Length 1879;
Best Local Similarity 58.6%; Pred. No. 8.6e-93;
Matches 836; Conservative 0; Mismatches 586; Indels 5; Gaps 1;

```
Qy      313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db      136 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 195

Qy      373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db      196 CTATCCAGAGTGTGTCT-----GCGTGGCCCGGAGAAGAGAGGCGAAATCAGGAGGATGA 250

Qy      433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db      251 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 310

Qy      493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db      311 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 370

Qy      553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db      371 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 430

Qy      613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db      431 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 490

Qy      673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db      491 TGCATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 550

Qy      733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db      551 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 610

Qy      793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db      611 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 670

Qy      853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db      671 TTAAGGATGTGGACTACGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 730

Qy      913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db      731 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 790

Qy      973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db      791 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 850

Qy     1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db      851 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 910

Qy     1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db      911 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 970

Qy     1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db      971 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1030

Qy     1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db     1031 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1090
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Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db       1091 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1150

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db       1151 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1210

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db       1211 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1270

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db       1271 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1330

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db       1331 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1390

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db       1391 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1450

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db       1451 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1510

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
Db       1511 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1557
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```
RESULT 41
AAH75171
ID   AAH75171 standard; cDNA; 2221 BP.
XX
AC   AAH75171;
XX
DT   13-NOV-2001  (first entry)
XX
DE   Nucleotide sequence of a human enzyme.
XX
KW   Human; enzyme; cancer; neurological disorder; epilepsy; stroke;
KW   Alzheimer's disease; Pick's disease; Huntington's disease; dementia;
KW   multiple sclerosis; Parkinson's disease; amyotropic lateral sclerosis;
KW   meningitis; schizophrenic disorder; neuroskeletal disorder; allergy;
KW   addison's disease; autoimmune disease; anemia; asthma; Crohn's disease;
KW   adult respiratory distress syndrome; atopic dermatitis; psoriasis;
KW   diabetes mellitus; osteoporosis; pancreatitis; rheumatoid arthritis;
KW   infection; genetic disorder; muscular dystrophy; Gaucher's disease;
KW   Huntington's chorea; sickle cell anemia; thalassemia; atherosclerosis;
KW   Von Willebrand's disease; Wilms' tumour; cell proliferative disorder;
KW   leukemia; hepatitis; cirrhosis; arteriosclerosis; gene therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             170. .1597
FT                   /*tag=  a
FT                   /product= "enzyme"
XX
PN   WO200164896-A2.
XX
PD   07-SEP-2001.
XX
PF   01-MAR-2001; 2001WO-US006806.
XX
PR   01-MAR-2000; 2000US-0186307P.
PR   28-MAR-2000; 2000US-0192532P.
PR   30-MAR-2000; 2000US-0193578P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Tang YT,  Lu DAM,  Bandman O,  Yue H,  Azimzai Y,  Lal P,  Burford N;
PI   Baughn MR;
XX
DR   WPI; 2001-550184/61.
DR   P-PSDB; AAG67143.
XX
PT   Novel human enzyme molecule useful for treating and preventing, e.g.,
PT   cancer, genetic disorders, neurological disorders, autoimmune and
PT   inflammatory disorders.
XX
PS   Claim 5; Page 149-150; 154pp; English.
XX
CC   The present sequence encodes a human enzyme. The enzyme polynucleotide
CC   and polypeptide are useful for diagnosis, treatment and prevention of
CC   cancers, neurological disorders (e.g. epilepsy, stroke, Alzheimer's
CC   disease, Pick's disease, Huntington's disease, dementia, multiple
CC   sclerosis, Parkinson's disease, amyotropic lateral sclerosis, bacterial
CC   and viral meningitis, schizophrenic disorders and neuroskeletal
CC   disorders), autoimmune/inflammatory disorders (e.g. allergies, addison's
CC   disease, autoimmune diseases, adult respiratory distress syndrome,
CC   anemia, asthma, Crohn's disease, atopic dermatitis, diabetes mellitus,
CC   osteoporosis, pancreatitis, psoriasis, rheumatoid arthritis, and viral,
CC   bacterial, fungal, parasitic, protozoal and helminthic infections),
CC   genetic disorder (e.g. Duchenne and Becker muscular dystrophy, Gaucher's
CC   disease, Huntington's chorea, sickle cell anemia, thalassemia, Von
CC   Willebrand's disease and Wilms' tumour), and cell proliferative disorder
CC   (e.g. atherosclerosis, leukemia, hepatitis, cirrhosis, and
CC   arteriosclerosis). The polynucleotide is also useful in somatic or
CC   germline gene therapy
XX
SQ   Sequence 2221 BP; 529 A; 567 C; 656 G; 469 T; 0 U; 0 Other;
```

```
  Query Match           20.9%;  Score 469;  DB 5;  Length 2221;
  Best Local Similarity  58.6%;  Pred. No. 1.1e-92;
  Matches  836;  Conservative    0;  Mismatches  585;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db        189 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 248

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db        249 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 302

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db        303 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 362

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db        363 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 422

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db        423 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 482

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db        483 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 542

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db        543 TGCATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 602

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db        603 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 662

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db        663 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 722
```

```
Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
              |    | ||||||||||| |    ||||| || ||    ||| |   |  | | ||||||
Db        723 TTAAGGATGTGGACTACGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 782

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
              |||||  || ||   | |||| |   |||||||   |  | ||||||  | |||||  ||
Db        783 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 842

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
              | ||  | || || ||    |  || |||    | |||||  | ||| |||||||  ||
Db        843 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 902

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
              ||  | ||     |||| |||  |   ||  | |||||| |||| || ||  | || |
Db        903 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 962

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
              ||||   |  | || ||||||||     ||     ||| | | |||| |  | ||| |||
Db        963 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1022

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
              | || |   ||        |||   |||   | |||  |      ||| | || || |
Db       1023 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1082

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
              | |||||||  ||| ||||||| ||||| ||  | ||||| ||||| ||||| ||   ||
Db       1083 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1142

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
              | ||||  | || || || || ||  |    ||  | || || || || ||| | || |
Db       1143 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1202

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
              | ||  |||||| |     |  || |   | ||||| ||| |  | ||    |  ||
Db       1203 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1262

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
              |  |  ||  |   ||  ||||  || |    || | ||||   |  ||      | || |
Db       1263 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1322

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
              ||  |  |  |   | || | || || || || |  | |||||| || |  ||||| |
Db       1323 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1382

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
              ||||   || |||||  ||| | |||| ||   ||  |||||  |  ||  |  || |
Db       1383 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1442

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
              |||||  |     ||||| |||  ||||  | ||  ||||  | |  ||||| ||||  |
Db       1443 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1502

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
              | || |||||||| ||  |||||||||  ||||||||||||||||||  |  | || |
Db       1503 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1562

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
              | |  | |  ||| |  |||||||  |  | |      | || |||
Db       1563 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1609
```

RESULT 42
AAH14599
ID AAH14599 standard; cDNA; 2643 BP.
XX
AC AAH14599;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA sequence SEQ ID NO:12213.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 12213; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 2643 BP; 638 A; 660 C; 749 G; 596 T; 0 U; 0 Other;

Query Match 20.9%; Score 469; DB 4; Length 2643;
Best Local Similarity 58.6%; Pred. No. 1.2e-92;
Matches 836; Conservative 0; Mismatches 585; Indels 6; Gaps 1;

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Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  |||||||  ||     ||||||||   |   |  |||  ||     | ||||||
Db        182 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 241

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        242 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 295

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |      | |||   |||||| |  |||||    |||||| || |
Db        296 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 355

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        356 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 415
```

```
Qy       553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db       416 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 475

Qy       613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db       476 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 535

Qy       673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db       536 TGTATGGGGGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 595

Qy       733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db       596 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 655

Qy       793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db       656 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 715

Qy       853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db       716 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 775

Qy       913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db       776 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 835

Qy       973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db       836 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 895

Qy      1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db       896 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 955

Qy      1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db       956 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1015

Qy      1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db      1016 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1075

Qy      1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db      1076 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1135

Qy      1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db      1136 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1195

Qy      1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db      1196 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1255

Qy      1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db      1256 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1315

Qy      1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db      1316 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1375

Qy      1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db      1376 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1435

Qy      1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db      1436 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1495

Qy      1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db      1496 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1555

Qy      1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
Db      1556 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1602
```

RESULT 43
AAD33907
ID AAD33907 standard; DNA; 2643 BP.
XX
AC AAD33907;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #24.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 28; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 2643 BP; 638 A; 660 C; 749 G; 596 T; 0 U; 0 Other;

Query Match 20.9%; Score 469; DB 6; Length 2643;
Best Local Similarity 58.6%; Pred. No. 1.2e-92;
Matches 836; Conservative 0; Mismatches 585; Indels 6; Gaps 1;

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Qy       313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db       182 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 241

Qy       373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db       242 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 295

Qy       433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db       296 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 355
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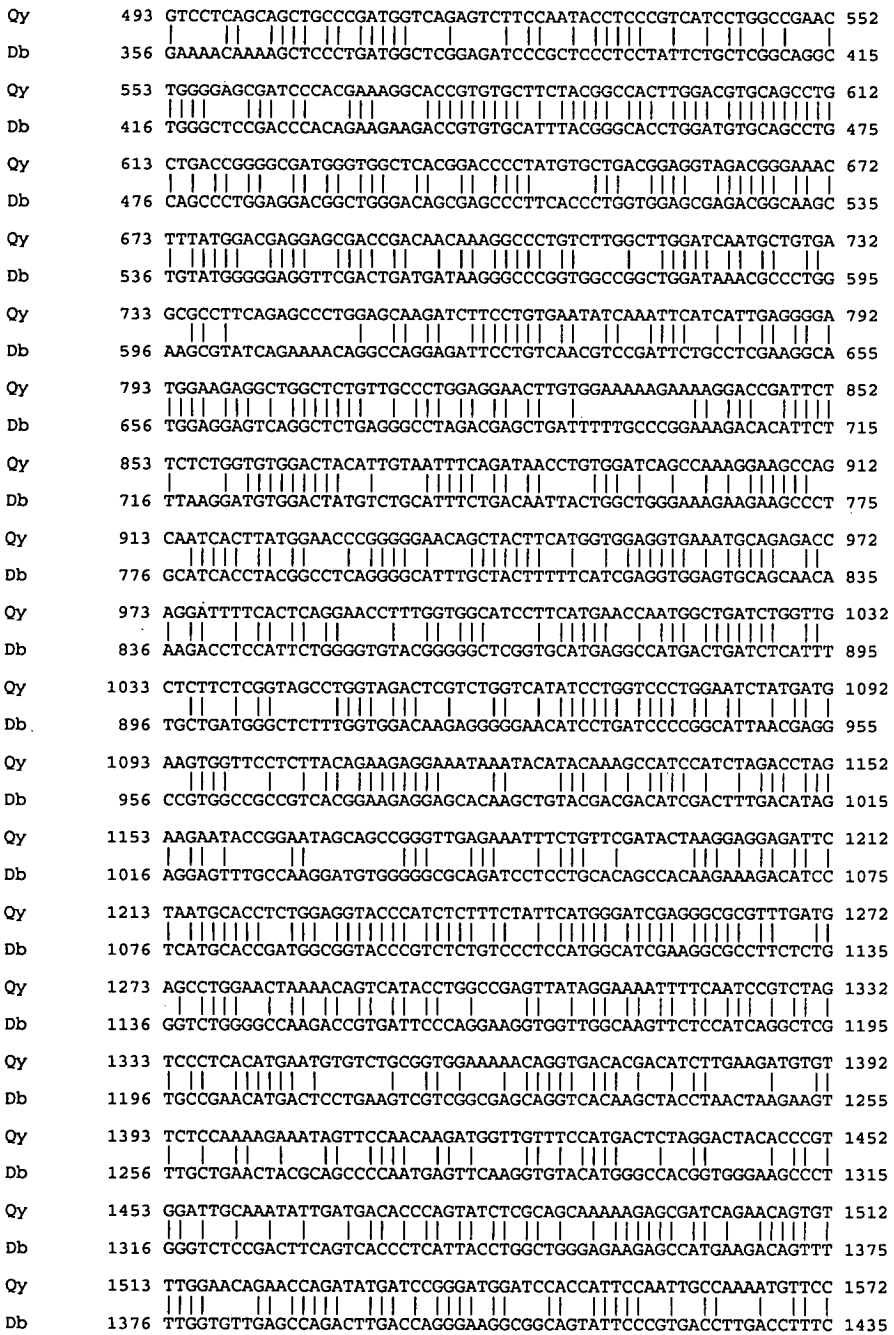
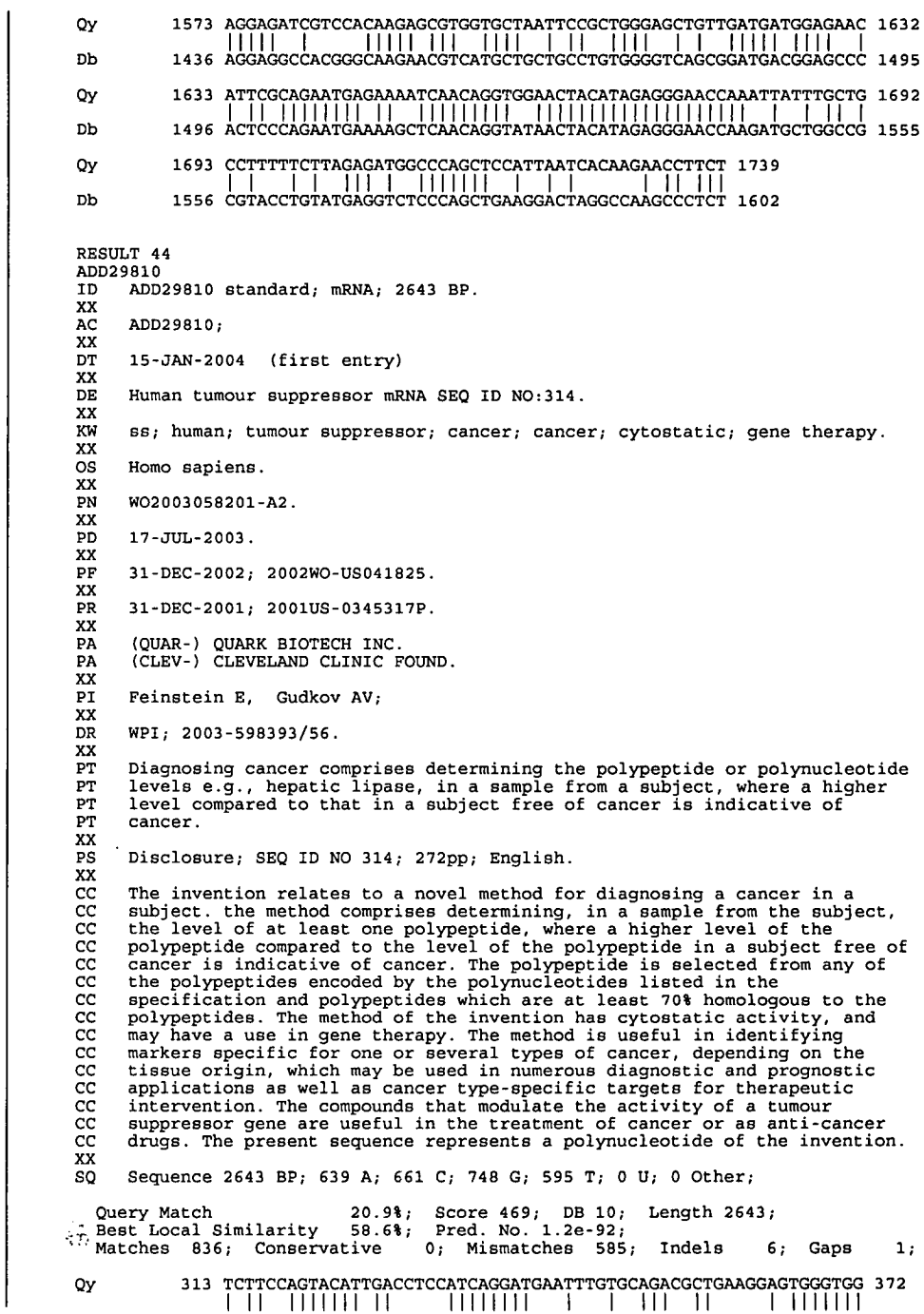
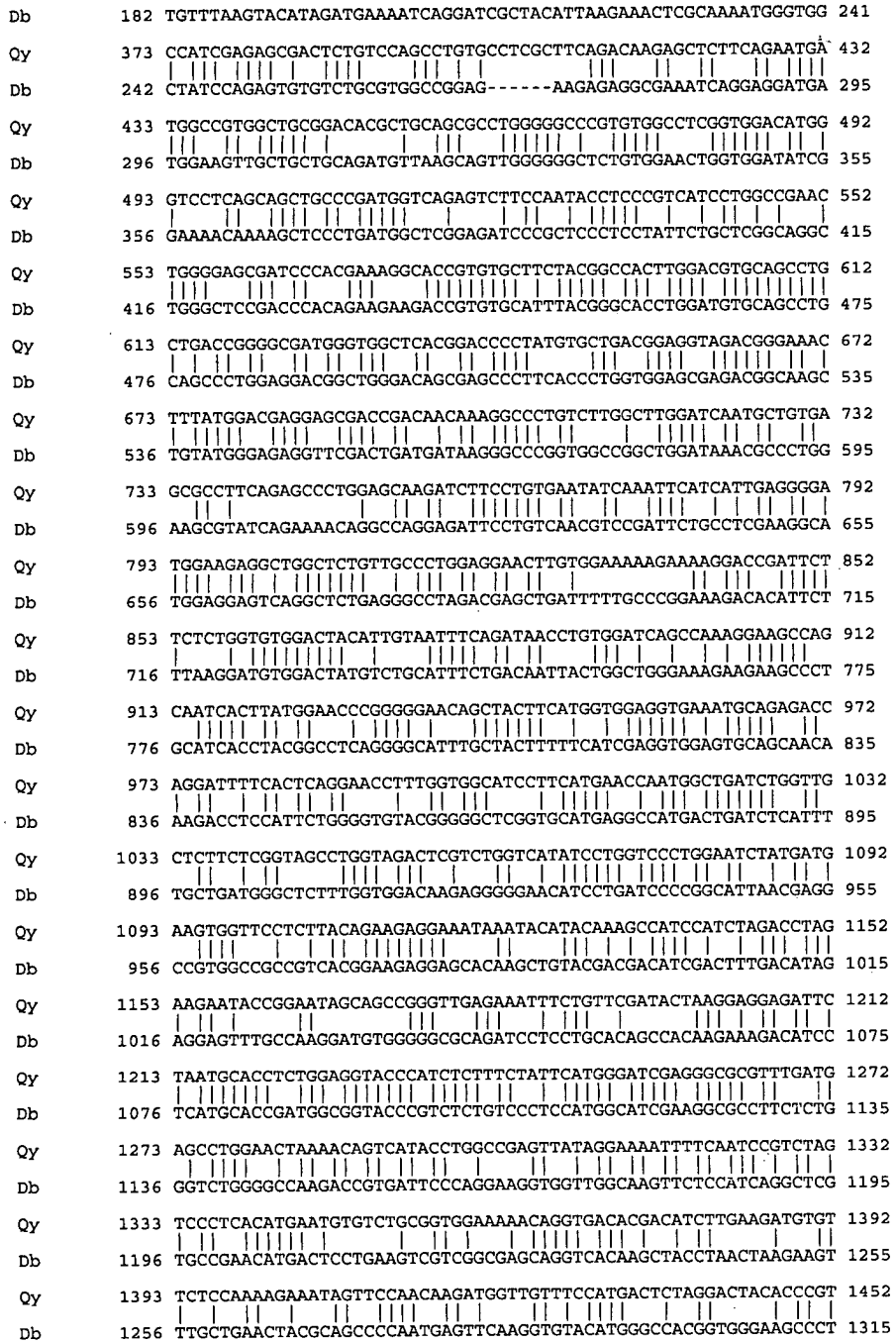




RESULT 44
ADD29810
ID ADD29810 standard; mRNA; 2643 BP.
XX
AC ADD29810;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human tumour suppressor mRNA SEQ ID NO:314.
XX
KW ss; human; tumour suppressor; cancer; cancer; cytostatic; gene therapy.
XX
OS Homo sapiens.
XX
PN WO2003058201-A2.
XX
PD 17-JUL-2003.
XX
PF 31-DEC-2002; 2002WO-US041825.
XX
PR 31-DEC-2001; 2001US-0345317P.
XX
PA (QUAR-) QUARK BIOTECH INC.
PA (CLEV-) CLEVELAND CLINIC FOUND.
XX
PI Feinstein E, Gudkov AV;
XX
DR WPI; 2003-598393/56.
XX
PT Diagnosing cancer comprises determining the polypeptide or polynucleotide
PT levels e.g., hepatic lipase, in a sample from a subject, where a higher
PT level compared to that in a subject free of cancer is indicative of
PT cancer.
XX
PS Disclosure; SEQ ID NO 314; 272pp; English.
XX
CC The invention relates to a novel method for diagnosing a cancer in a
CC subject. the method comprises determining, in a sample from the subject,
CC the level of at least one polypeptide, where a higher level of the
CC polypeptide compared to the level of the polypeptide in a subject free of
CC cancer is indicative of cancer. The polypeptide is selected from any of
CC the polypeptides encoded by the polynucleotides listed in the
CC specification and polypeptides which are at least 70% homologous to the
CC polypeptides. The method of the invention has cytostatic activity, and
CC may have a use in gene therapy. The method is useful in identifying
CC markers specific for one or several types of cancer, depending on the
CC tissue origin, which may be used in numerous diagnostic and prognostic
CC applications as well as cancer type-specific targets for therapeutic
CC intervention. The compounds that modulate the activity of a tumour
CC suppressor gene are useful in the treatment of cancer or as anti-cancer
CC drugs. The present sequence represents a polynucleotide of the invention.
XX
SQ Sequence 2643 BP; 639 A; 661 C; 748 G; 595 T; 0 U; 0 Other;

  Query Match   20.9%; Score 469; DB 10; Length 2643;
  Best Local Similarity 58.6%; Pred. No. 1.2e-92;
  Matches 836; Conservative   0; Mismatches 585; Indels   6; Gaps   1;



RESULT 45
ACC72761
ID ACC72761 standard; cDNA; 2643 BP.
XX
AC ACC72761;
XX
DT 09-JUL-2003 (first entry)
XX
DE Human cancer related protein encoding cDNA SEQ ID NO:100.
XX
KW Human; cancer; diagnosis; screening; modulator; leukaemia; ischaemia;
KW heart disease; atherosclerosis; endometriosis; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003025138-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-US029560.
XX
PR 17-SEP-2001; 2001US-0323469P.
PR 20-SEP-2001; 2001US-0323887P.
PR 13-NOV-2001; 2001US-0350666P.
PR 08-FEB-2002; 2002US-0355145P.
PR 08-FEB-2002; 2002US-0355257P.
PR 12-APR-2002; 2002US-0372246P.
XX
PA (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI Afar D, Aziz N, Gish KC, Hevezi PA, Mack DH, Wilson KE;
PI Zlotnik A;
XX
DR WPI; 2003-354600/33.
DR P-PSDB; ABR58614.
XX
PT New genes that are up-regulated or down-regulated in cancers, useful as
PT markers for diagnosing e.g. cancer, ischemia or heart diseases, or as
PT therapeutic targets for screening drugs for treating these diseases.
XX
PS Claim 8; Page 676-677; 767pp; English.
XX
CC The present invention describes an isolated nucleic acid molecule, which
CC comprises the sequence of any of the genes that are up-regulated or down-
CC regulated in specific cancers (e.g. about 1031 genes up-regulated in
CC acute lymphocytic leukemia). ACC72641 to ACC72860 represent cancer
CC related gene nucleotide sequences which encode the proteins given in
CC ABR58521 to ABR58709. Also described: (1) determining the presence or
CC absence of a pathological cell in a patient; (2) an expression vector
CC comprising a nucleic acid molecule described above; (3) a host cell
CC comprising the vector; (4) an isolated polypeptide, which is encoded by

CC the nucleic acid; (5) an antibody that specifically binds the polypeptide
CC of (4); (6) specifically targeting a compound to a pathological cell in a
CC patient by administering to the patient the antibody above; and (7) a
CC drug screening assay. The nucleic acid is useful as diagnostic markers or
CC therapeutic targets. In particular, the nucleic acid is useful for
CC diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow,
CC bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary,
CC pancreas, prostate, skin and uterus), wounds, ischaemia, heart diseases,
CC atherosclerosis and endometriosis. The nucleic acid is also useful in
CC drug screening, particularly for identifying agents for treating these
CC pathologies
XX
SQ Sequence 2643 BP; 640 A; 662 C; 747 G; 594 T; 0 U; 0 Other;

Query Match 20.9%; Score 469; DB 10; Length 2643;
Best Local Similarity 58.6%; Pred. No. 1.2e-92;
Matches 836; Conservative 0; Mismatches 585; Indels 6; Gaps 1;

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Qy       313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db       182 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 241

Qy       373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db       242 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 295

Qy       433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db       296 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 355

Qy       493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db       356 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 415

Qy       553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db       416 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 475

Qy       613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db       476 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 535

Qy       673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db       536 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 595

Qy       733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db       596 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 655

Qy       793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db       656 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 715

Qy       853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db       716 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 775

Qy       913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db       776 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 835

Qy       973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db       836 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 895

Qy      1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db       896 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 955

Qy      1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db       956 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1015

Qy      1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db      1016 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1075

Qy      1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db      1076 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1135

Qy      1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db      1136 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1195

Qy      1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db      1196 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1255

Qy      1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db      1256 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1315

Qy      1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db      1316 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1375

Qy      1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db      1376 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1435

Qy      1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db      1436 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1495

Qy      1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db      1496 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1555

Qy      1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
Db      1556 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1602
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RESULT 46
ACN40354
ID ACN40354 standard; cDNA; 2643 BP.
XX
AC ACN40354;
XX
DT 18-NOV-2004 (first entry)
XX
DE Tumour-associated antigenic target (TAT) cDNA DNA326472, SEQ ID NO:5082.
XX
KW Tumour-associated antigenic target; TAT; human; overexpression; cancer;
KW tumour; diagnosis; cell proliferative disorder; breast cancer;
KW colorectal cancer; lung cancer; ovarian cancer; liver cancer;
KW central nervous system cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; melanoma; leukaemia; hybridisation probe;
KW chromosome identification; chromosome mapping; gene mapping;
KW gene therapy; cytostatic; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2004030615-A2.
XX
PD 15-APR-2004.
XX
PF 29-SEP-2003; 2003WO-US028547.
XX
PR 02-OCT-2002; 2002US-0414971P.
XX
PA (GETH) GENENTECH INC.
XX
PI Wu TD, Zhang Z, Zhou Y;

XX
DR WPI; 2004-347921/32.
XX
PT New tumor-associated antigenic target polypeptides and nucleic acids,
PT useful in preparing a medicament for treating or detecting a
PT proliferative disorder, e.g. breast, lung, colorectal, ovarian or
PT prostate cancer or tumor.
XX
PS Claim 1; SEQ ID NO 5082; 7273pp; English.
XX
CC The invention relates to human tumour-associated antigenic target (TAT)
CC polypeptides, and their related nucleic acids. The TAT polypeptides are
CC overexpressed in cancer tissues compared to normal tissues, and may thus
CC serve as effective targets for the diagnosis and treatment of cancer in
CC mammals. The invention also relates to nucleic acid and polypeptide
CC sequences at least 80% identical to the TAT nucleic acids and
CC polypeptides; expression vectors and host cells comprising a TAT nucleic
CC acid; an antibody specific for a TAT polypeptide; a peptide or organic
CC molecule which binds to a TAT polypeptide; fusion proteins comprising a
CC TAT polypeptide; and methods and compositions for the treatment or
CC diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,
CC antibodies, antagonists, binding molecules and compositions are useful
CC for diagnosing or treating a cell proliferative disorder associated with
CC increased TAT expression, particularly cancers such as breast cancer,
CC colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC cancer, pancreatic cancer, cervical cancer, cancers of the central
CC nervous system, melanoma and leukaemia. TAT nucleic acids may further be
CC used as hybridisation probes, in chromosome and gene mapping, in
CC chromosome identification and in gene therapy. The present sequence
CC represents a TAT nucleic acid of the invention
XX
SQ Sequence 2643 BP; 640 A; 663 C; 747 G; 593 T; 0 U; 0 Other;

Query Match 20.9%; Score 469; DB 13; Length 2643;
Best Local Similarity 58.6%; Pred. No. 1.2e-92;
Matches 836; Conservative 0; Mismatches 585; Indels 6; Gaps 1;

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Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||      | |||||||
Db        182 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 241

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        242 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 295

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |      |  |||  |||||| |  |||||    |||||| || |
Db        296 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 355

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        356 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 415

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    ||||||||| | ||||| ||| |||| ||||||||||
Db        416 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 475

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||     |||  ||||  |||||| || |
Db        476 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 535

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || |||||  ||     |  |||||  || ||  ||
Db        536 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 595

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
                || |          |  || ||  ||||||| ||  ||  ||||  | | || || |
Db        596 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 655

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
              |||| ||| | |||||||  | ||| || || ||  |          || |||  |||||
Db        656 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 715
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Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
              |    | |||||||||  |     |||||  || ||     ||| |  |  | | ||||||
Db        716 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 775

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
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Db        776 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 835

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
              | ||  | ||  ||  ||     |  || |||     | |||||  | |||  |||||||  ||
Db        836 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 895

Qy        1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
               ||  | ||     |||| |||  |   ||  | |||||| |||| ||  ||   | || |
Db        896 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 955

Qy        1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
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Qy        1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
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Qy        1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
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Qy        1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
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Qy        1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
               | ||  |||||| |       |  || |   | |||||  ||| |  | ||      |   ||
Db        1196 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1255

Qy        1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
               |  |  ||  |  ||  |||| || |    || | ||||  |  ||    | || |
Db        1256 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1315

Qy        1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
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Db        1316 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1375

Qy        1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
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Db        1376 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1435

Qy        1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
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Db        1436 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1495

Qy        1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
               | || |||||||| ||  |||||||||  ||||||||||||||||||||  |  | || |
Db        1496 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1555

Qy        1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
               | |   | |  ||| |  |||||||  |  | |       | || |||
Db        1556 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1602
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RESULT 47
AAI99591
ID AAI99591 standard; cDNA; 1988 BP.
XX
AC AAI99591;
XX
DT 04-JAN-2002 (first entry)
XX
DE Human expressed polynucleotide SEQ ID NO 54.
XX
KW Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;

KW antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW neurological disease; infection; nephrotropic; gene therapy; vaccine; ss.
XX
OS Homo sapiens.
XX
PN WO200155387-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001310.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
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PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465573/50.
DR P-PSDB; AAM99979.
XX
PT Isolated digestive system associated polypeptide for treating, preventing
PT and/ or prognosing disorders related to the digestive system including
PT digestive system cancers and also for testing and detection e.g.
PT diagnosis.
XX
PS Claim 1; SEQ ID NO 54; 509pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (AAI99548-AAI99604) and proteins
CC (AAM99936-AAM99984) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 1988 BP; 461 A; 509 C; 586 G; 425 T; 0 U; 7 Other;

Query Match 20.9%; Score 468.6; DB 4; Length 1988;
Best Local Similarity 58.5%; Pred. No. 1.3e-92;
Matches 835; Conservative 1; Mismatches 585; Indels 6; Gaps 1;

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Db        173 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 232

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |         |||   ||  ||   || ||||
Db        233 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 286

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       |  |||   |||||| |  |||||    |||||| || |
Db        287 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 346

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
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Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
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Db        587 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 646

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Db        767 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 826

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
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Db        827 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 886

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               | ||||  | || || || || || |   ||  | || || || || ||| | || |
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RESULT 48
AAS09224
ID AAS09224 standard; cDNA; 1988 BP.
XX
AC AAS09224;
XX

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DT   07-NOV-2001  (first entry)
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DE   Novel cDNA encoding for human ADAM or serine protease.
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KW   serine protease; cancer; immune disease; blood-related disorder; HMWFM73;
KW   hyperproliferative disorder; renal disorder; cardiovascular disorder;
KW   respiratory disorder; inflammatory disorder; neurological disorder;
KW   endocrine disorder; reproductive system disorder; infectious disease;
KW   gastrointestinal disorder; gene therapy; cytostatic; anti inflammatory;
KW   fertility; thrombolytic; anti coagulant; nootropic; neuroprotective; ss.
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XX
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PF   17-JAN-2001; 2001WO-US001311.
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PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
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PR   14-AUG-2000; 2000US-0225757P.
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PR   29-SEP-2000; 2000US-0236370P.
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PR   02-OCT-2000; 2000US-0237040P.
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PR   13-OCT-2000; 2000US-0239937P.
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PR   08-NOV-2000; 2000US-0246477P.
PR   08-NOV-2000; 2000US-0246478P.
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PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-451927/48.
DR   P-PSDB; AAU06066.
XX
PT   Isolated polypeptide for treating, preventing and/ or prognosing
PT   disorders such as cancer, inflammation, infertility, neurological
PT   disorders, blood clotting disorders and also for testing and detection
PT   e.g. diagnosis.
XX
PS   Claim 4; SEQ ID NO 11; 433pp; English.
XX
CC   The present invention relates to a novel cDNA sequence encoding for a
CC   novel human ADAM (proteins which contain A Disintegrin And
CC   Metalloprotease domain, also known as adamalysins) or serine protease.
CC   The cDNA is cloned from cDNA clone HMWFM73. The polynucleotide sequences
CC   encoding for the novel ADAM or serine protease and the polypeptide itself
CC   are useful for preventing, treating or ameliorating a medical condition,
CC   particularly cancer, when administered. They can be used in the treatment
CC   and diagnosis of a range of conditions such as immune diseases (e.g.
CC   severe combined immunodeficiency, SCID), blood-related disorders (e.g.
CC   haemophilia), hyperproliferative disorders (e.g. leukaemia), renal
CC   disorders (e.g. kidney failure), cardiovascular disorders (e.g. heart
CC   disease), respiratory disorders (e.g. asthma), inflammatory disorders
CC   (e.g. rheumatoid arthritis), neurological disorders (e.g. Parkinson's
CC   disease), endocrine disorders (e.g. hyperthyroidism); reproductive system
CC   disorders (e.g. testicular atrophy), infectious disease (e.g. HIV), and
CC   gastrointestinal disorders (e.g. appendicitis). The polynucleotide
CC   sequences of the invention are also useful in gene therapy. The present
CC   sequence encodes for a novel human ADAM or serine protease. Note: The
CC   sequence data for this patent did not form part of the printed

  Query Match             20.9%;  Score 468.6;  DB 4;  Length 1988;
  Best Local Similarity   58.5%;  Pred. No. 1.3e-92;
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Db        287 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 346

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db        347 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 406

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db        407 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 466

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db        467 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 526

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db        527 TGYATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 586

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
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Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db        767 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 826

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db        827 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 886

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
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Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db        947 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1006

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Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
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Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
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RESULT 49
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AC AAH75199;
XX
DT 13-NOV-2001 (first entry)
XX
DE Nucleotide sequence of a human carnosinase 2 (HC2) polypeptide.
XX
KW Human; carnosinase 2; HC2; cognitive disorder; foetal deficiency; trauma;
KW developmental abnormality; neurodegenerative disorder; schizophrenia;
KW amyotrophic lateral sclerosis; Parkinson's disease; ischaemic shock;
KW epilepsy; polyarthritis; hypertension; ischaemic heart damage; ulcer;
KW adrenal cortical function; wound healing; inflammatory disease; ss.
XX
OS Homo sapiens.
XX
FH Key   Location/Qualifiers
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FT   /*tag= a
FT   /product= "carnosinase 2 (HC2)"
XX
PN EP1122307-A1.
XX
PD 08-AUG-2001.
XX
PF 04-FEB-2000; 2000EP-00400313.
XX
PR 04-FEB-2000; 2000EP-00400313.
XX
PA (SNFI) SANOFI-SYNTHELABO.
XX
PI Ledig J, Saudek V;
XX
DR WPI; 2001-543058/61.
DR P-PSDB; AAG67236.
XX
PT Human carnosinase polypeptides and polynucleotides, useful for treating
PT or preventing cognitive disorders, developmental abnormalities and fetal
PT deficiencies, neurodegenerative disorders, or inflammatory disorders.
XX
PS Claim 1; Page 16-19; 30pp; English.
XX
CC The present sequence encodes a human carnosinase 2 (HC2) polypeptide. The
CC carnosinase polypeptides and polynucleotides are useful for treating or
CC preventing cognitive disorders, developmental abnormalities and fetal
CC deficiencies, neurodegenerative disorders, such as amyotrophic lateral
CC sclerosis, Parkinson's disease, schizophrenia, abnormal mental states,
CC ischaemic shock, epilepsy, polyarthritis, hypertension, ischaemic heart
CC damage, ulcers, adrenal cortical function, wound healing, trauma, and
CC inflammatory diseases. The HC2 polynucleotides may also be used as
CC diagnostic probes or primers, hybridization probes for cDNA and genomic
CC DNA, to isolate full length cDNAs and genomic clones encoding HC2 and
CC other genes having high similarity to the HC2 gene, as research reagents
CC and materials for discovery of treatments and diagnostics for animal and
CC human diseases, and for chromosome identification. The HC2 polypeptides
CC may be used as immunogens to produce antibodies immunospecific for the
CC HC2 polypeptides, to induce immunological response in a mammal against
CC the above mentioned disorders, in screening for candidate compounds which
CC stimulate or inhibit the activity of HC2, and to assess the binding of
CC small molecule substrates and ligands in cells, cell-free preparations,
CC chemical libraries or natural product mixtures
XX
SQ Sequence 1428 BP; 340 A; 357 C; 436 G; 295 T; 0 U; 0 Other;

Query Match 20.9%; Score 467.8; DB 5; Length 1428;

Best Local Similarity 58.9%; Pred. No. 1.8e-92;
Matches 827; Conservative 0; Mismatches 572; Indels 6; Gaps 1;

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Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db        314 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 373

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db        374 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 433

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db        434 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 493

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db        494 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 553

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db        554 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 613

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db        614 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 673

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db        674 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 733

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db        734 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 793

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db        794 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 853

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db        854 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 913

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db        914 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 973

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db        974 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1033

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
```

```
Db       1034 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1093

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452

Db       1094 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1153

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512

Db       1154 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1213

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572

Db       1214 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1273

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632

Db       1274 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1333

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692

Db       1334 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1393

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCT 1717

Db       1394 CGTACCTGTATGAGGTCTCCCAGCT 1418


RESULT 50
AAS97193
ID   AAS97193 standard; cDNA; 1428 BP.
XX
AC   AAS97193;
XX
DT   26-FEB-2002  (first entry)
XX
DE   Human metalloprotease partial DNA sequence #22.
XX
KW   Human; protease; PCR primer; cytostatic; immunomodulator; cardiant;
KW   vasotropic; antimigraine; analgesic; endocrine; nootropic; tranquiliser;
KW   hypertensive; hypotensive; neuroleptic; neuroprotective; anabolic;
KW   anorectic; antiinflammatory; aspartyl protease; cysteine protease;
KW   metalloprotease; serine protease; cancer; haematopoietic; breast; colon;
KW   lung; prostrate; cervical; brain; ovarian; bladder; kidney; pain;
KW   immune-related disease; cardiovascular disease; neuronal disease;
KW   migraine; sexual dysfunction; mood disorder; attention disorder;
KW   cognition disorder; hypotension; hypertension; psychotic disorder;
KW   dyskinesia; metabolic disorder; inflammatory disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200183782-A2.
XX
PD   08-NOV-2001.
XX
PF   04-MAY-2001; 2001WO-US014431.
XX
PR   04-MAY-2000; 2000US-0201879P.
XX
PA   (SUGE-) SUGEN INC.
XX
PI   Plowman GD,  Whyte D,  Sudarsanam S,  Manning G,  Caenepeel S;
PI   Payne V;
XX
DR   WPI; 2002-041502/05.
DR   P-PSDB; AAU72910.
XX
PT   Novel protease polypeptide useful for screening for substances that may
PT   be used to treat, e.g., cancers, immune-related diseases, cardiovascular
PT   disease, migraine, pain, psychotic and inflammatory disorders.
XX
PS   Claim 30; Fig 1V-W; 232pp; English.
XX
CC   The invention relates to an isolated, enriched, or purified protease
CC   polypeptide (I) and polynucleotide (II) encoding (I). (I) may be used to
CC   screen for substances (S) that may modulate its activity. Administering S
CC   (which modulates protease activity in vitro) may be used to treat a
CC   disease or disorder selected from cancers (e.g., of tissues, of blood or
CC   haematopoietic origin, of the breast, colon, lung, prostrate, cervical,
CC   brain, ovarian, bladder or kidney), immune-related diseases and
CC   disorders, cardiovascular disease, brain or neuronal-associated diseases
CC   (e.g., central or peripheral nervous system diseases, migraine, pain,
CC   sexual dysfunction, mood disorders, attention disorders, cognition
CC   disorders, hypotension, hypertension, psychotic disorders, neurological
CC   disorders and dyskinesias), metabolic disorders and inflammatory
CC   disorders. (I) may also be useful as a diagnostic tool for a disease or
CC   disorder such as those above. AAS97159-AAS97195 represent human protease
CC   coding sequences and primers of the invention
XX
SQ   Sequence 1428 BP; 340 A; 357 C; 436 G; 295 T; 0 U; 0 Other;

  Query Match             20.9%;  Score 467.8;  DB 6;  Length 1428;
  Best Local Similarity   58.9%;  Pred. No. 1.8e-92;
  Matches  827;  Conservative    0;  Mismatches  572;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372

Db         20 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 79

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432

Db         80 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 133

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492

Db        134 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 193

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552

Db        194 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 253

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612

Db        254 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 313

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672

Db        314 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 373

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732

Db        374 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 433

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792

Db        434 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 493

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852

Db        494 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 553

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912

Db        554 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 613

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972

Db        614 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 673

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032

Db        674 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 733

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092

Db        734 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 793
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Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db        794 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 853

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db        854 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 913

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db        914 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 973

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db        974 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1033

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db        1034 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1093

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db        1094 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1153

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db        1154 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1213

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db        1214 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1273

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db        1274 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1333

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db        1334 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1393

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCT 1717
Db        1394 CGTACCTGTATGAGGTCTCCCAGCT 1418
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RESULT 51
AAD33906
ID AAD33906 standard; cDNA; 1428 BP.
XX
AC AAD33906;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme cDNA #23.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; gene; ss.
XX
OS Homo sapiens.
XX
FH Key Location/Qualifiers
FT CDS 1. .1428
FT /*tag= a
FT /product= "Human carboxypeptidase-like enzyme"
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
DR P-PSDB; AAE20961.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Claim 1; Fig 23; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human cDNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 1428 BP; 339 A; 357 C; 437 G; 295 T; 0 U; 0 Other;

Query Match 20.9%; Score 467.8; DB 6; Length 1428;
Best Local Similarity 58.9%; Pred. No. 1.8e-92;
Matches 827; Conservative 0; Mismatches 572; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db         20 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 79

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db         80 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 133

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db        134 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 193

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db        194 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 253

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db        254 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 313

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db        314 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 373

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db        374 TGTATGGGGGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 433

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db        434 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 493

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db        494 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 553

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db        554 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 613

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
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Db        614 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 673

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032

Db        674 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 733

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092

Db        734 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 793

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152

Db        794 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 853

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212

Db        854 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 913

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272

Db        914 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 973

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332

Db        974 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1033

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392

Db       1034 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1093

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452

Db       1094 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1153

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512

Db       1154 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1213

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572

Db       1214 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1273

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632

Db       1274 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1333

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692

Db       1334 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1393

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCT 1717

Db       1394 CGTACCTGTATGAGGTCTCCCAGCT 1418
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RESULT 52
AAI60824
ID AAI60824 standard; cDNA; 2657 BP.
XX
AC AAI60824;
XX
DT 22-OCT-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 4813.
XX
KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW peripheral nervous system; neuropathy; central nervous system; CNS;
KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW leukaemia; ss.
XX
OS Homo sapiens.
XX
PN WO200153312-A1.
XX
PD 26-JUL-2001.
XX
PF 26-DEC-2000; 2000WO-US034263.
XX
PR 23-DEC-1999; 99US-00471275.
PR 21-JAN-2000; 2000US-00488725.
PR 25-APR-2000; 2000US-00552317.
PR 20-JUN-2000; 2000US-00598042.
PR 19-JUL-2000; 2000US-00620312.
PR 03-AUG-2000; 2000US-00653450.
PR 14-SEP-2000; 2000US-00662191.
PR 19-OCT-2000; 2000US-00693036.
PR 29-NOV-2000; 2000US-00727344.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J, Zhao QA;
PI Zhou P, Goodrich R, Drmanac RT;
XX
DR WPI; 2001-442253/47.
DR P-PSDB; AAM41668.
XX
PT Novel nucleic acids and polypeptides, useful for treating disorders such
PT as central nervous system injuries.
XX
PS Claim 1; SEQ ID NO 4813; 10078pp; English.
XX
CC The invention relates to human nucleic acids (AAI57798-AAI61369) and the
CC encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC immunosuppressant and cytostatic activity. The polynucleotides are useful
CC in gene therapy. A composition containing a polypeptide or polynucleotide
CC of the invention may be used to treat diseases of the peripheral nervous
CC system, such as peripheral nervous injuries, peripheral neuropathy and
CC localised neuropathies and central nervous system diseases, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC utilisation of the activities such as: Immune system suppression,
CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC assays for receptor activity, arthritis and inflammation, leukaemias and
CC C.N.S disorders. Note: The sequence data for this patent did not form
CC part of the printed specification
XX
SQ Sequence 2657 BP; 649 A; 663 C; 751 G; 594 T; 0 U; 0 Other;

Query Match 20.8%; Score 467.4; DB 4; Length 2657;
Best Local Similarity 58.5%; Pred. No. 2.6e-92;
Matches 835; Conservative 0; Mismatches 586; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372

Db        186 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 245

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432

Db        246 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 299

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492

Db        300 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 359

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552

Db        360 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 419

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612

Db        420 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 479
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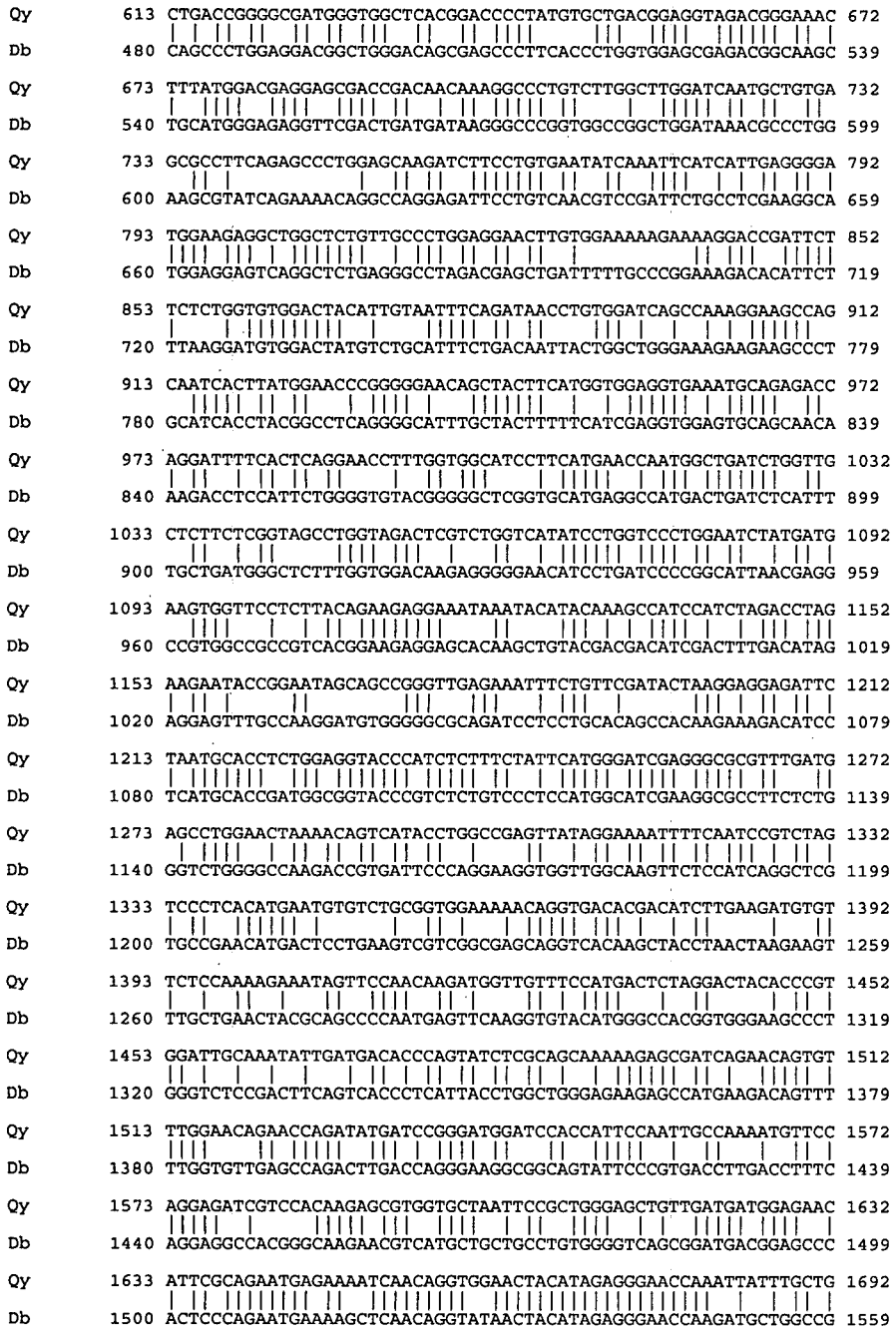

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Qy       613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db       480 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 539

Qy       673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db       540 TGCATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 599

Qy       733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db       600 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 659

Qy       793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db       660 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 719

Qy       853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db       720 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 779

Qy       913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db       780 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 839

Qy       973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db       840 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 899

Qy      1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db       900 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 959

Qy      1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db       960 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1019

Qy      1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db      1020 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1079

Qy      1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db      1080 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1139

Qy      1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db      1140 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1199

Qy      1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db      1200 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1259

Qy      1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db      1260 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1319

Qy      1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db      1320 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1379

Qy      1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db      1380 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1439

Qy      1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db      1440 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1499

Qy      1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db      1500 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1559

Qy      1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
Db      1560 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1606
```

RESULT 53
AAI59038
ID AAI59038 standard; cDNA; 2710 BP.
XX
AC AAI59038;
XX
DT 22-OCT-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 1241.
XX
KW Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
KW peripheral nervous system; neuropathy; central nervous system; CNS;
KW Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
KW amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
KW chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
KW leukaemia; ss.
XX
OS Homo sapiens.
XX
PN WO200153312-A1.
XX
PD 26-JUL-2001.
XX
PF 26-DEC-2000; 2000WO-US034263.
XX
PR 23-DEC-1999; 99US-00471275.
PR 21-JAN-2000; 2000US-00488725.
PR 25-APR-2000; 2000US-00552317.
PR 20-JUN-2000; 2000US-00598042.
PR 19-JUL-2000; 2000US-00620312.
PR 03-AUG-2000; 2000US-00653450.
PR 14-SEP-2000; 2000US-00662191.
PR 19-OCT-2000; 2000US-00693036.
PR 29-NOV-2000; 2000US-00727344.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;
PI Wang J, Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J, Zhao QA;
PI Zhou P, Goodrich R, Drmanac RT;
XX
DR WPI; 2001-442253/47.
DR P-PSDB; AAM39882.
XX
PT Novel nucleic acids and polypeptides, useful for treating disorders such
PT as central nervous system injuries.
XX
PS Claim 1; SEQ ID NO 1241; 10078pp; English.
XX
CC The invention relates to human nucleic acids (AAI57798-AAI61369) and the
CC encoded polypeptides (AAM38642-AAM42213) with nootropic,
CC immunosuppressant and cytostatic activity. The polynucleotides are useful
CC in gene therapy. A composition containing a polypeptide or polynucleotide
CC of the invention may be used to treat diseases of the peripheral nervous
CC system, such as peripheral nervous injuries, peripheral neuropathy and
CC localised neuropathies and central nervous system diseases, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the
CC utilisation of the activities such as: Immune system suppression,
CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,
CC assays for receptor activity, arthritis and inflammation, leukaemias and
CC C.N.S disorders. Note: The sequence data for this patent did not form
CC part of the printed specification
XX
SQ Sequence 2710 BP; 659 A; 680 C; 765 G; 606 T; 0 U; 0 Other;

Query Match 20.8%; Score 467.4; DB 4; Length 2710;

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  Best Local Similarity   58.5%;  Pred. No. 2.6e-92;
  Matches  835;  Conservative    0;  Mismatches  586;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  |||||| ||      ||||||||    |   |  |||  ||      | |||||||
Db        237 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 296

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |         |||   ||  ||   || ||||
Db        297 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 350

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       |  |||   |||||| |  |||||    |||||| || |
Db        351 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 410

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || ||||    |     | ||  | |||||  |  | || | |    |
Db        411 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 470

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||    || ||   |||   |||||||| | ||||| ||| |||| ||||||||||
Db        471 TGGGCTCTGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 530

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||     |||  ||||  |||||| || |
Db        531 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 590

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || ||||| ||    |  |||| || ||  ||
Db        591 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 650

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
              || |          | || ||  ||||||| ||  ||  ||||  | | || || |
Db        651 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 710

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
              ||||  ||| | |||||||  | ||| || || ||  |           || |||  |||||
Db        711 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 770

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
              |    | |||||||||    |    |||| || ||    ||| |   |  | | ||||||
Db        771 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 830

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
              |||||  || ||   | |||| |  |||||||   |  | ||||||  | |||||  ||
Db        831 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 890

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
              | ||  | || || ||    |  || |||    | ||||||  | ||| |||||||  ||
Db        891 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 950

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
                ||  | ||      |||| |||  |   ||  | |||||| |||| || ||  | || |
Db        951 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 1010

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
                ||||   |  | || ||||||||    ||    ||| | | |||| |  | ||| |||
Db       1011 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1070

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
              | || |     ||       |||   |||   | |||  |      ||| | || || |
Db       1071 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1130

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
              | |||||||  ||| |||||||  |||||  ||   | |||||  |||||  |||||  ||    ||
Db       1131 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1190

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
                | ||||  | || || || || ||  |    ||  | || || || || ||| | || |
Db       1191 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1250

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
              | ||  |||||| |      |  || |   | ||||| ||| |  | ||     |   ||

Db       1251 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1310

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
              |  |  ||  |   ||  ||||  || |    || | ||||    |  ||      | || |
Db       1311 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1370

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
              || |  |  |   |  | || | || || || || |  | |||||| || |  ||||| |
Db       1371 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1430

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
              ||||    || |||||  ||| | |||| ||   ||  |||||  |  ||    |  || |
Db       1431 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1490

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
              |||||  |      ||||| |||  ||||  | ||  ||||  | |  ||||| ||||  |
Db       1491 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1550

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
              | || ||||||||  ||  |||||||||  ||||||||||||||||||||  |  | || |
Db       1551 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1610

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
              | |  | |  ||| |  |||||||  |  | |    | || |||
Db       1611 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1657


RESULT 54
ADQ99261
ID   ADQ99261 standard; cDNA; 2710 BP.
XX
AC   ADQ99261;
XX
DT   23-SEP-2004  (first entry)
XX
DE   DNA encoding human GPCR-like protein seqid 931.
XX
KW   ophthalmological; immunomodulatory; cytostatic; antiatherosclerotic;
KW   antidiabetic; GPCR-like protein; ophthalmic disorder;
KW   neurological disorder; immunological disorder; nephritic disorder;
KW   hormonal dysfunction; cancer; atherosclerosis; diabetes;
KW   molecular weight marker; food supplement; human; ss.
XX
OS   Homo sapiens.
XX
PN   US6569662-B1.
XX
PD   27-MAY-2003.
XX
PF   19-JUL-2000; 2000US-00620312.
XX
PR   21-JAN-2000; 2000US-00488725.
PR   25-APR-2000; 2000US-00552317.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Zhou P,  Drmanac RT;
XX
DR   WPI; 2001-442255/47.
XX
PT   New G-protein-coupled receptor-like polypeptides and polynucleotides,
PT   useful for treating diseases of ophthalmic, neurological, immunological
PT   and nephritic systems and hormonal dysfunction, cancer, atherosclerosis
PT   and diabetes.
XX
PS   Example 2; SEQ ID NO 931; 92pp; English.
XX
CC   The invention describes an isolated polynucleotide (I) comprising a fully
CC   defined (S1) of 749, 3188, 2484, 1169, 2936, 1467, 5773, 5714, 4041,
CC   1372, 3996, 3945, 2735, 1788, 585, 1782, 927, 5714 or 2282 nucleotides as
CC   given in the specification, its translated or protein coding portion, its
CC   extracellular portion or its active domain. The GPCR-like polypeptides
CC   and polynucleotides are useful for the treatment of diseases of
```

CC ophthalmic, neurological, immunological and nephritic systems. They may
CC also be used to treat hormonal dysfunction, cancer, atherosclerosis and
CC diabetes. The antibodies are useful for detecting or quantitating the
CC polypeptide in tissue. The polypeptides can also be used as molecular
CC weight markers and as a food supplement. This sequence represents a human
CC polynucleotide of the invention.
XX
SQ Sequence 2710 BP; 659 A; 680 C; 765 G; 606 T; 0 U; 0 Other;

Query Match 20.8%; Score 467.4; DB 5; Length 2710;
Best Local Similarity 58.5%; Pred. No. 2.6e-92;
Matches 835; Conservative 0; Mismatches 586; Indels 6; Gaps 1;

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Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db        237 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 296

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db        297 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 350

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db        351 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 410

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db        411 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 470

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db        471 TGGGCTCTGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 530

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db        531 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 590

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db        591 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 650

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db        651 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 710

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db        711 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 770

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
Db        771 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 830

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
Db        831 GCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 890

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
Db        891 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 950

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
Db        951 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 1010

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAG 1152
Db       1011 CCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAG 1070

Qy       1153 AAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTC 1212
Db       1071 AGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCC 1130

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
Db       1131 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 1190

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
Db       1191 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 1250

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
Db       1251 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 1310

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
Db       1311 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 1370

Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db       1371 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 1430

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db       1431 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 1490

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db       1491 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 1550

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db       1551 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 1610

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
Db       1611 CGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1657
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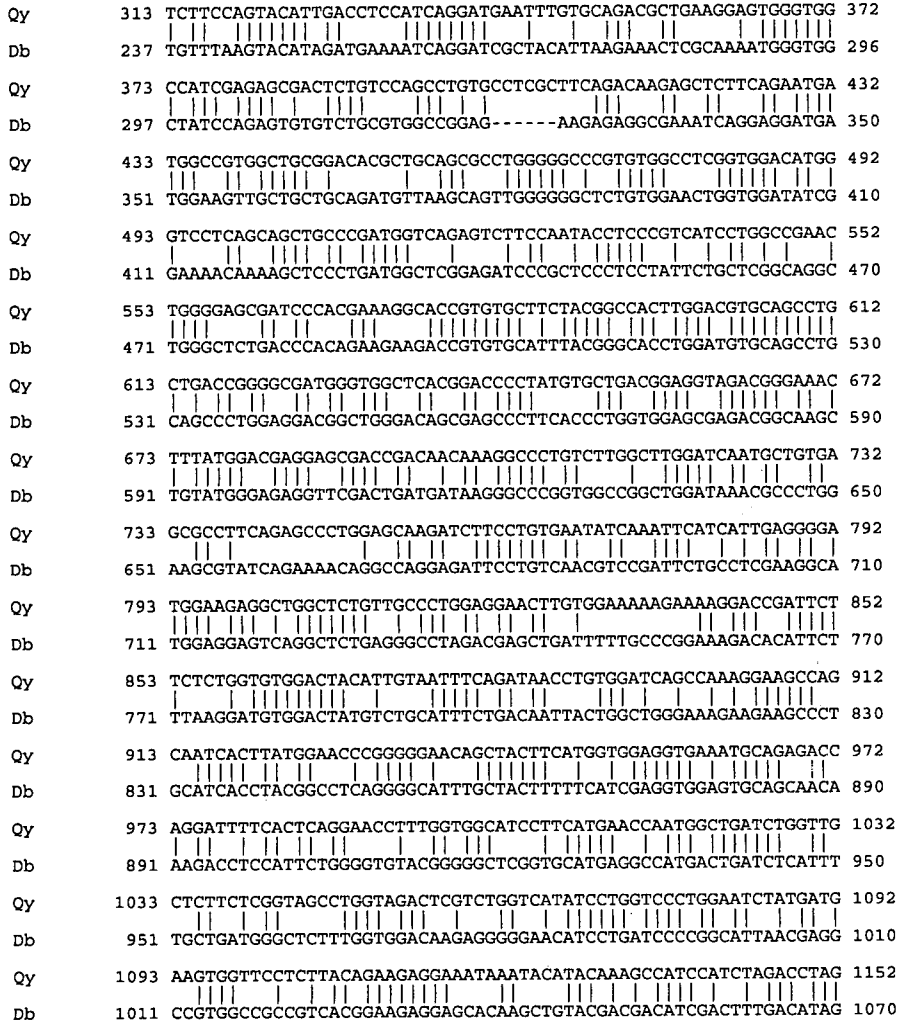
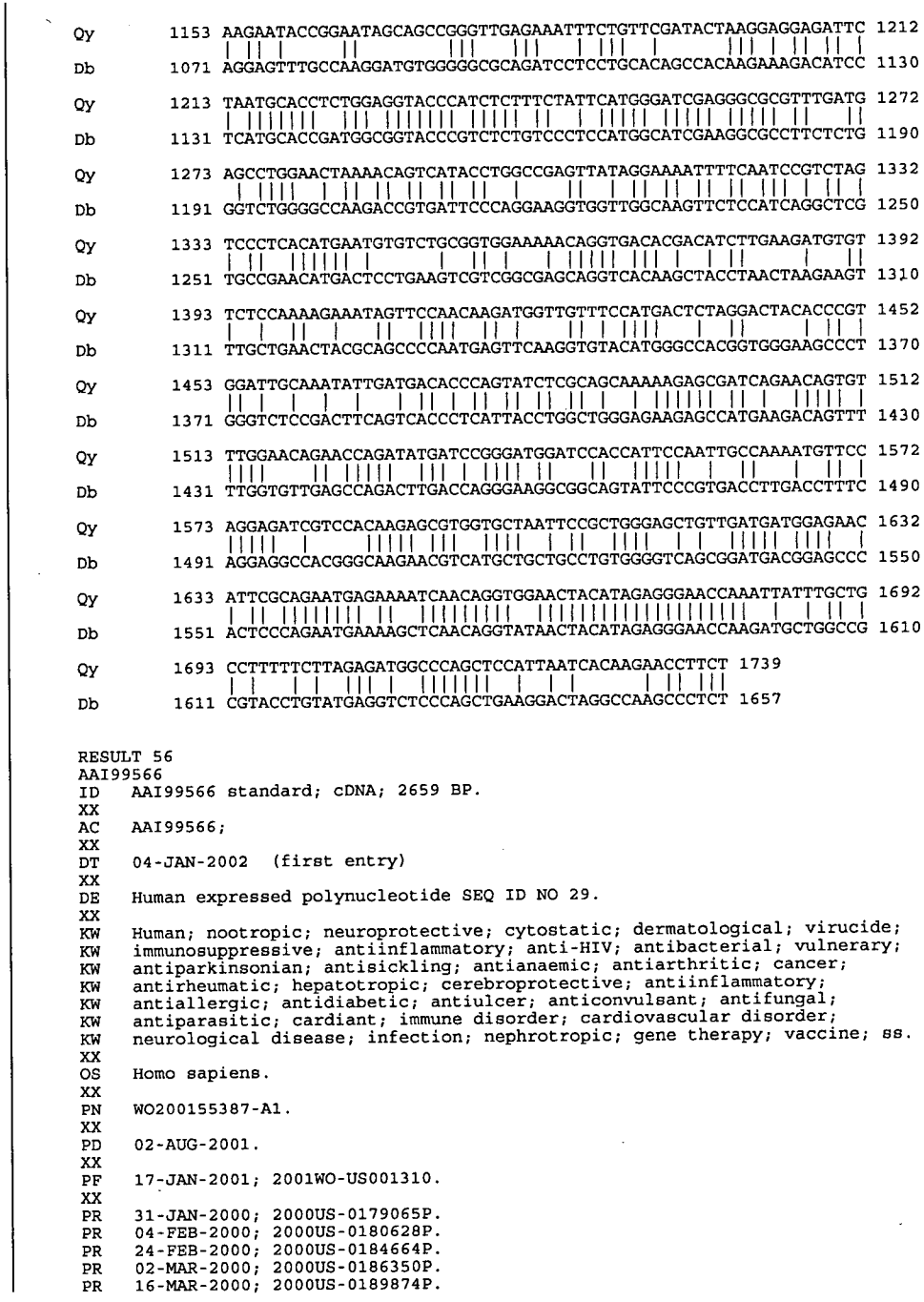
RESULT 55
ADB49021
ID ADB49021 standard; cDNA; 2710 BP.
XX
AC ADB49021;
XX
DT 04-DEC-2003 (first entry)
XX
DE Novel human cDNA SEQ ID NO 931.
XX
KW ss; cancer; neurodegenerative disease; human.
XX
OS Homo sapiens.
XX
PN US2003104529-A1.
XX
PD 05-JUN-2003.
XX
PF 04-JAN-2002; 2002US-00037270.
XX
PR 21-JAN-2000; 2000US-00488725.
PR 25-APR-2000; 2000US-00552317.
PR 19-JUL-2000; 2000US-00620312.
XX
PA (ZHOU/) ZHOU P.
PA (TANG/) TANG Y T.
PA (LIUC/) LIU C.
PA (ASUN/) ASUNDI V.
PA (DRMA/) DRMANAC R T.
XX
PI Zhou P, Tang YT, Liu C, Asundi V, Drmanac RT;
XX
DR WPI; 2003-678194/64.
XX
PT New polynucleotide, useful for treating diseases e.g., cancer or
PT neurodegenerative diseases.

XX
PS Claim 1; SEQ ID NO 931; 99pp; English.
XX
CC The invention relates to a polynucleotide comprising a sequence given in
CC the specification, or its mature protein-coding portion, or its
CC complement. The polynucleotide is useful for treating diseases e.g.,
CC cancer or neurodegenerative diseases and many others listed in the
CC specification. The present sequence represents a novel human cDNA. Note:
CC The sequence data for this patent did not form part of the printed
CC specification but was obtained in electronic format directly from USPTO
CC at seqdata.uspto.gov/sequence.html?DocID=20030104529.
XX
SQ Sequence 2710 BP; 659 A; 680 C; 765 G; 606 T; 0 U; 0 Other;

Query Match 20.8%; Score 467.4; DB 9; Length 2710;
Best Local Similarity 58.5%; Pred. No. 2.6e-92;
Matches 835; Conservative 0; Mismatches 586; Indels 6; Gaps 1;





RESULT 56
AAI99566
ID AAI99566 standard; cDNA; 2659 BP.
XX
AC AAI99566;
XX
DT 04-JAN-2002 (first entry)
XX
DE Human expressed polynucleotide SEQ ID NO 29.
XX
KW Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW neurological disease; infection; nephrotropic; gene therapy; vaccine; ss.
XX
OS Homo sapiens.
XX
PN WO200155387-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001310.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.

PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
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PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
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PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
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PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
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PR 01-NOV-2000; 2000US-0244617P.
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PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
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PR 17-NOV-2000; 2000US-0249215P.
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PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
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PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
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PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
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PR 06-DEC-2000; 2000US-0251479P.
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PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465573/50.
DR P-PSDB; AAM99954.
XX
PT Isolated digestive system associated polypeptide for treating, preventing
PT and/ or prognosing disorders related to the digestive system including
PT digestive system cancers and also for testing and detection e.g.
PT diagnosis.
XX
PS Claim 1; SEQ ID NO 29; 509pp + Sequence Listing; English.
XX

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CC   The invention relates to novel genes (AAI99548-AAI99604) and proteins
CC   (AAM99936-AAM99984) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC   the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC   ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC   breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC   disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC   anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC   multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC   cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC   ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC   infectious diseases such as viral, bacterial, fungal and parasitic
CC   infections. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 2659 BP; 660 A; 665 C; 737 G; 597 T; 0 U; 0 Other;

  Query Match             19.9%;  Score 446;  DB 4;  Length 2659;
  Best Local Similarity   58.5%;  Pred. No. 1.3e-87;
  Matches  835;  Conservative    0;  Mismatches  585;  Indels    8;  Gaps    3;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  |||||| ||     |||||||    |   | |||  ||     | |||||||
Db        173 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 232

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        233 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 286

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       |  |||   |||||| |  |||||    |||||| || |
Db        287 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 346

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCC-GTCATCCTGGCCGAA 551
              |    ||  |||| || |||||    |    | ||  | ||||||  |  | || | |
Db        347 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCCTATTCTGCTCGGCAGG 406

Qy        552 CTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCT 611
              |||  |   ||| ||   |||    |||||||| | ||||| ||| |||| |||||||||
Db        407 CTGCGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCT 466

Qy        612 GCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAA 671
              || | || ||  || || |||  ||  || ||||     |||  ||||  |||||| ||
Db        467 GCAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAG 526

Qy        672 CTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTG 731
              || |||||  ||||  |||| ||  | || |||||  ||     |  |||||  || ||  ||
Db        527 CTGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTG 586

Qy        732 AGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGG 791
                || |              |  || ||  ||||||| ||  ||  ||||  | | || ||
Db        587 GAAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGC 646

Qy        792 ATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTC 851
              ||||| ||| | |||||||  | ||| || || ||  |-         || |||  ||||
Db        647 ATGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTC 706

Qy        852 TTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCA 911
              ||    | |||||||||  |    |||||| || ||    ||| |  |  | | ||||||
Db        707 TTTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCC 766

Qy        912 GCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGAC 971
                |||||  || ||    | |||| |   |||||||   |  | ||||||  | |||||  ||
Db        767 TGCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAAC 826

Qy        972 CAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTT 1031
              | ||  | ||  ||  ||     |  || |||    | |||||  | ||| |||||||  ||
Db        827 AAAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATT 886

Qy       1032 GCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGAT 1091
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                ||  | ||     |||| |||  |   ||  | ||||||  |||| || ||  | ||
Db        887 TTGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAG 946

Qy       1092 GAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTA 1151
              |  ||||   |  | || ||||||||     ||     |||  | |  ||||  |  ||| ||
Db        947 GCCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATA 1006

Qy       1152 GAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATT 1211
              || || |     ||          |||   |||   | |||  |       ||| | || ||
Db       1007 GAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATC 1066

Qy       1212 CTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGAT 1271
              || |||||||  ||| ||||||| ||||| ||    || ||| |||| ||||| ||    |
Db       1067 CTCATGCACCGATGGCGGTACCCGTCTCTGTC-CCTCCTGGCATCGAAGGCGCCTTCTCT 1125

Qy       1272 GAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTA 1331
              | | ||||  | || || || || ||  |     ||  | || || || || ||| | ||
Db       1126 GGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTC 1185

Qy       1332 GTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTG 1391
              || ||  |||||| |      |  || |   | ||||| ||| |  | ||      |   |
Db       1186 GTGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAG 1245

Qy       1392 TTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCG 1451
              ||  |  ||  |   ||  ||||  || |    || | ||||   |  ||     | ||
Db       1246 TTTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCC 1305

Qy       1452 TGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTG 1511
              ||| |  |  |  |  | || | || || || || |  | |||||| || |  |||||
Db       1306 TGGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTT 1365

Qy       1512 TTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTC 1571
              |||||   || |||||  ||| | |||| ||   ||  |||||  |  ||   |  ||
Db       1366 TTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTT 1425

Qy       1572 CAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAA 1631
              ||||||  |    ||||| |||  ||||  | ||  ||||  | |  ||||| ||||
Db       1426 CAGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCC 1485

Qy       1632 CATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCT 1691
              || || |||||||| ||  |||||||||  ||||||||||||||||||||  |  | ||
Db       1486 CACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCC 1545

Qy       1692 GCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
              || |   | |  ||| |  |||||||  |  | |      | || |||
Db       1546 GCGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 1593
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RESULT 57
ACH13751
ID   ACH13751 standard; cDNA; 456 BP.
XX
AC   ACH13751;
XX
DT   13-OCT-2003  (first entry)
XX
DE   Human adult brain cDNA #963.
XX
KW   Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW   genome mapping; biodiversity; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   US2003073623-A1.
XX
PD   17-APR-2003.
XX
PF   30-JUL-2001; 2001US-00918995.
XX
PR   30-JUL-2001; 2001US-00918995.
XX
PA   (DRMA/) DRMANAC R T.
PA   (LABA/) LABAT I.
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PA   (STAC/) STACHE-CRAIN B.
PA   (DICK/) DICKSON M C.
PA   (JONE/) JONES L W.
XX
PI   Drmanac RT,  Labat I,  Stache-Crain B,  Dickson MC,  Jones LW;
XX
DR   WPI; 2003-615964/58.
XX
PT   New polynucleotide sequences obtained from various cDNA libraries, useful
PT   as hybridization probes, as oligomers for PCR, for chromosome and gene
PT   mapping, in the recombinant production of protein, or in generating
PT   antisense DNA or RNA.
XX
PS   Claim 1; SEQ ID NO 963; 44pp; English.
XX
CC   The invention relates to an isolated polynucleotide comprising any one of
CC   38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC   determined by the technique of SBH (sequencing by hybridisation). Also
CC   included is a purified polypeptide comprising a sequence corresponding to
CC   a reading frame of the novel polynucleotide. The nucleic acid sequences
CC   are useful in diagnostics as expressed sequence tags (EST) for
CC   identifying expressed genes or for physical mapping of the human genome,
CC   in forensics, in assessing biodiversities, or in identifying mutations
CC   responsible for genetic disorders and other traits. The nucleotide
CC   sequences are also useful as hybridisation probes, as oligomers for PCR,
CC   for chromosome and gene mapping, in the recombinant production of
CC   protein, or in generating antisense DNA or RNA. The purified polypeptide
CC   is useful for generating antibodies specific for it. The present sequence
CC   is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ   Sequence 456 BP; 82 A; 134 C; 137 G; 100 T; 0 U; 3 Other;

  Query Match           18.2%;  Score 407.4;  DB 9;  Length 456;
  Best Local Similarity  99.1%;  Pred. No. 2.2e-79;
  Matches  421;  Conservative    0;  Mismatches    1;  Indels    3;  Gaps    1;

Qy        135 GGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCC 194
              || |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         32 GGCACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGAGGCTTCAGAACTCC 91

Qy        195 AGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTG---TGCTGCTG 251
              |||||||||||||||||||||||||||||||||||||||||||||||||   ||||||||
Db         92 AGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGGCTGTGCTGCTGCTG 151

Qy        252 CTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAA 311
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        152 CTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCGGCGCTGTTAGAGAAA 211

Qy        312 GTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTG 371
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        212 GTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTG 271

Qy        372 GCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATG 431
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        272 GCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATG 331

Qy        432 ATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATG 491
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        332 ATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATG 391

Qy        492 GGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAA 551
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        392 GGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAA 451

Qy        552 CTGGG 556
              |||||
Db        452 CTGGG 456


RESULT 58
ABL18867
ID   ABL18867 standard; DNA; 1347 BP.
XX
AC   ABL18867;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster genomic polynucleotide SEQ ID NO 8074.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical; gene; ds.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009231.
XX
PR   23-MAR-2000; 2000US-0191637P.
PR   11-JUL-2000; 2000US-00614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signaling and cell-cell
PT   interactions.
XX
PS   Claim 1; SEQ ID NO 8074; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC   ABB72072). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1347 BP; 377 A; 278 C; 359 G; 333 T; 0 U; 0 Other;

  Query Match           15.5%;  Score 348.2;  DB 4;  Length 1347;
  Best Local Similarity  56.0%;  Pred. No. 3e-66;
  Matches  709;  Conservative    0;  Mismatches  543;  Indels   15;  Gaps    2;

Qy        412 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 471
              ||   ||| ||    | ||| |||    | | |||||   ||||  |   ||||| |||
Db         83 GAGGCGAGATCGGTCGTATGGTGGAATGGACCGCGGATCGGCTGAGGTCTCTGGGCGCCG 142

Qy        472 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATAC 531
              |    ||  ||  ||||||  |||    ||||  | || |||| | | ||  |||
Db        143 AGACAGAGCTGGCAGATGTGGGTCAGCAGACTTTGCCGAACGGCCAGATTATACCTCTAC 202

Qy        532 CTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACG 591
              |    ||  | ||||      |||| |  || ||| | ||    |||||||   |||| |
Db        203 CAAAGGTTCTGCTGGGAACTTTGGGCAAAGACCCCTCTAAGAAGACCGTGTTGGTCTATG 262

Qy        592 GCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGC 651
              | || ||||| |||||||| ||      ||  ||||| |||  |||  | |||| || ||
Db        263 GTCATTTGGATGTGCAGCCCGCCCTGAAGGAAGATGGATGGAACACCAATCCCTTTGAGC 322

Qy        652 TGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCT 711
              | || ||||| || || ||||| | |||||| || ||  ||||| |||| || |||||
Db        323 TTACAGAGGTGGATGGAAAACTGTTTGGACGCGGGGCATCCGACGACAAGGGACCTGTTC 382

Qy        712 TGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATA 771
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Db        383 TGTGCTGGATCCACGCTATCGAAGCTTATCAGAAGCTCAACATTGCACTGCCTGTGAATG 442

Qy        772 TCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGG 831

Db        443 TTAAATTCGTATTTGAGGGAATGGAGGAAAGCGGCAGCGAAGGCCTCGATGACTTGTTAT 502

Qy        832 AAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGT 891

Db        503 TGGAACGTAAAGATAATTTCTTAGCGGATGTTGATTTTGTTTGCATATCCGATAACTACT 562

Qy        892 GGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGG 951

Db        563 GGCTTGGAAAAAAACGCCCTTGCCTCACATATGGGCTTCGCGGTTTGGCATACTTTCAAG 622

Qy        952 TGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATG 1011

Db        623 TGGAGGTGGAATGCTCCAGCAAAGACTTGCATAGTGGAGTTTTTGGGGGTACAGTTCACG 682

Qy       1012 AACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCC 1071

Db        683 AAGCAATGCCGGATCTGTGTCATTTGCTGAGCATTCTTGTCGATAAAGATACAAATATCC 742

Qy       1072 TGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACA 1131

Db        743 TAGTCCCTGGTGTGGATCGCGACGTCGCACCACAGATTAAGAACGAGCAATCTATATATG 802

Qy       1132 AAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGT 1191

Db        803 AGAACATAGACTTTGAAGTTTCTGAGTACAAGAAAGACATTGGTGTTGAACAGCTGCCGC 862

Qy       1192 TCGATACTAAGGAGGAGATTCTAATGCA---CCTCTGGAGGTACCCATCTCTTTCTATTC 1248

Db        863 ATAATGGCGATAAAACAAGGTTACTTCAAGCCAGGTGGCGCTATCCCAGTCTTTCTGTTC 922

Qy       1249 ATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTA 1308

Db        923 ACGGAATTGAAGGTGCATTTTATGAGCCAGGCGCAAAAACTGTCATTCCGAAGAAGGTTA 982

Qy       1309 TAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGG 1368

Db        983 TTGGTAAGTTCTCTATTCGCCTTGTCCCCAACCAAGATCCAAAGCATATTGAGGAGTGTG 1042

Qy       1369 TGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTT 1428

Db       1043 TTGTAAAATACCTTAATGATAAATGGGCCGAGCGAGGATCTCCTAACAAAATGAAGGTTT 1102

Qy       1429 CCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAG 1488

Db       1103 CTGGCA------------AGCCCTGGACTGAGGACCCTAACCATCCTCATTATGAGGCTG 1150

Qy       1489 CAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGATCCA 1548

Db       1151 CAAAAAGAGCCATAAAGCATGTTTTCAATGTGGAACCAGATATGACCCGCGAAGGGGGAT 1210

Qy       1549 CCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGC 1608

Db       1211 CTATTCCAGTAACGTTAACATTGCAGGAAGCCACTGGTAAAAACGTTATCCTTGTGCCAG 1270

Qy       1609 TGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACTACA 1668

Db       1271 TGGGTGCATGTGACGACGGTGCCCATTCTCAAAATGAGAAAATCGATATTTACAATTACA 1330

Qy       1669 TAGAGGG 1675

Db       1331 TCGAAGG 1337
```

RESULT 59
ABL18871
ID ABL18871 standard; DNA; 1389 BP.
XX
AC ABL18871;
XX
DT 26-MAR-2002 (first entry)
XX
DE Drosophila melanogaster genomic polynucleotide SEQ ID NO 8086.
XX
KW Drosophila; developmental biology; cell signalling; insecticide;
KW pharmaceutical; gene; ds.
XX
OS Drosophila melanogaster.
XX
PN WO200171042-A2.
XX
PD 27-SEP-2001.
XX
PF 23-MAR-2001; 2001WO-US009231.
XX
PR 23-MAR-2000; 2000US-0191637P.
PR 11-JUL-2000; 2000US-00614150.
XX
PA (PEKE) PE CORP NY.
XX
PI Venter JC, Adams M, Li PWD, Myers EW;
XX
DR WPI; 2001-656860/75.
XX
PT New isolated nucleic acid detection reagent for detecting 1000 or more
PT genes from Drosophila and for elucidating cell signaling and cell-cell
PT interactions.
XX
PS Claim 1; SEQ ID NO 8086; 21pp + Sequence Listing; English.
XX
CC The invention relates to an isolated nucleic acid detection reagent
CC capable of detecting 1000 or more genes from Drosophila. The invention is
CC useful in developmental biology and in elucidating cell signalling and
CC cell-cell interactions in higher eukaryotes for the development of
CC insecticides, therapeutics and pharmaceutical drugs. The invention
CC discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC ABB72072). The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 1389 BP; 389 A; 287 C; 365 G; 348 T; 0 U; 0 Other;

Query Match 15.5%; Score 348.2; DB 4; Length 1389;
Best Local Similarity 56.0%; Pred. No. 3e-66;
Matches 709; Conservative 0; Mismatches 543; Indels 15; Gaps 2;

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Qy        412 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 471

Db        125 GAGGCGAGATCGGTCGTATGGTGGAATGGACCGCGGATCGGCTGAGGTCTCTGGGCGCCG 184

Qy        472 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATAC 531

Db        185 AGACAGAGCTGGCAGATGTGGGTCAGCAGACTTTGCCGAACGGCCAGATTATACCTCTAC 244

Qy        532 CTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACG 591

Db        245 CAAAGGTTCTGCTGGGAACTTTGGGCAAAGACCCCTCTAAGAAGACCGTGTTGGTCTATG 304

Qy        592 GCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGC 651

Db        305 GTCATTTGGATGTGCAGCCCGCCCTGAAGGAAGATGGATGGAACACCAATCCCTTTGAGC 364

Qy        652 TGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCT 711

Db        365 TTACAGAGGTGGATGGAAAACTGTTTGGACGCGGGGCATCCGACGACAAGGGACCTGTTC 424

Qy        712 TGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATA 771

Db        425 TGTGCTGGATCCACGCTATCGAAGCTTATCAGAAGCTCAACATTGCACTGCCTGTGAATG 484

Qy        772 TCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGG 831
```

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Db        485 TTAAATTCGTATTTGAGGGAATGGAGGAAAGCGGCAGCGAAGGCCTCGATGACTTGTTAT 544

Qy        832 AAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGT 891

Db        545 TGGAACGTAAAGATAATTTCTTAGCGGATGTTGATTTTGTTTGCATATCCGATAACTACT 604

Qy        892 GGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGG 951

Db        605 GGCTTGGAAAAAAACGCCCTTGCCTCACATATGGGCTTCGCGGTTTGGCATACTTTCAAG 664

Qy        952 TGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATG 1011

Db        665 TGGAGGTGGAATGCTCCAGCAAAGACTTGCATAGTGGAGTTTTTGGGGGTACAGTTCACG 724

Qy       1012 AACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCC 1071

Db        725 AAGCAATGCCGGATCTGTGTCATTTGCTGAGCATTCTTGTCGATAAAGATACAAATATCC 784

Qy       1072 TGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACA 1131

Db        785 TAGTCCCTGGTGTGGATCGCGACGTCGCACCACAGATTAAGAACGAGCAATCTATATATG 844

Qy       1132 AAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGT 1191

Db        845 AGAACATAGACTTTGAAGTTTCTGAGTACAAGAAAGACATTGGTGTTGAACAGCTGCCGC 904

Qy       1192 TCGATACTAAGGAGGAGATTCTAATGCA---CCTCTGGAGGTACCCATCTCTTTCTATTC 1248

Db        905 ATAATGGCGATAAAACAAGGTTACTTCAAGCCAGGTGGCGCTATCCCAGTCTTTCTGTTC 964

Qy       1249 ATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTA 1308

Db        965 ACGGAATTGAAGGTGCATTTTATGAGCCAGGCGCAAAAACTGTCATTCCGAAGAAGGTTA 1024

Qy       1309 TAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGG 1368

Db       1025 TTGGTAAGTTCTCTATTCGCCTTGTCCCCAACCAAGATCCAAAGCATATTGAGGAGTGTG 1084

Qy       1369 TGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTT 1428

Db       1085 TTGTAAAATACCTTAATGATAAATGGGCCGAGCGAGGATCTCCTAACAAAATGAAGGTTT 1144

Qy       1429 CCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAG 1488

Db       1145 CTGGCA------------AGCCCTGGACTGAGGACCCTAACCATCCTCATTATGAGGCTG 1192

Qy       1489 CAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGATCCA 1548

Db       1193 CAAAAAGAGCCATAAAGCATGTTTTCAATGTGGAACCAGATATGACCCGCGAAGGGGGAT 1252

Qy       1549 CCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGC 1608

Db       1253 CTATTCCAGTAACGTTAACATTGCAGGAAGCCACTGGTAAAAACGTTATCCTTGTGCCAG 1312

Qy       1609 TGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACTACA 1668

Db       1313 TGGGTGCATGTGACGACGGTGCCCATTCTCAAAATGAGAAAATCGATATTTACAATTACA 1372

Qy       1669 TAGAGGG 1675

Db       1373 TCGAAGG 1379


RESULT 60
AAS80063
ID   AAS80063 standard; cDNA; 1047 BP.
XX
AC   AAS80063;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #15867.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG15876.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 15867; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1047 BP; 246 A; 268 C; 313 G; 220 T; 0 U; 0 Other;

  Query Match             15.2%;  Score 340.2;  DB 5;  Length 1047;
  Best Local Similarity   58.6%;  Pred. No. 1.6e-64;
  Matches  608;  Conservative    0;  Mismatches  428;  Indels    1;  Gaps    1;

Qy        660 GTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGG 719

Db          5 GTAGACGGCAAGCTGCATGGGAGAGGTTCGACTGATGATATTGGCCCGGTGGCCGGCTGG 64

Qy        720 ATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTC 779

Db         65 ATAAACGCCCTGGAAGCGTATCAGAAAACAGGCCAGGAGACTCCTGTCAACGTCCGATTC 124

Qy        780 ATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAA 839

Db        125 TGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGG 184

Qy        840 AAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGC 899

Db        185 AAAGACACATTCTTTAAGGATGTGGACTGCGTCTGCATTTCTGACAATTACTGGCTGGGA 244
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Qy        900 CAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTG 959
              | | ||||||    |||| || ||   | |||| |   |||||||  |  | ||||||
Db        245 AAGAAGAAGCCCTGCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTG 304

Qy        960 AAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATG 1019
              | |||||  || | ||  | || || ||    |  || |||    | |||||  | |||
Db        305 GAGTGCAGCAACAAAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATG 364

Qy        1020 GCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCT 1079
               |||||||  ||   ||  | ||     |||| |||  |   ||  | |||||| ||||
Db        365 ACTGATCTCATTTTGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCC 424

Qy        1080 GGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATC 1139
               || ||  | || |  ||||    |  | || ||||||||    ||    ||| | | ||||
Db        425 GGCATTAACGAGGCCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATC 484

Qy        1140 CATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACT 1199
               |  | ||| || | || |     ||          |||   |||   | |||  |
Db        485 GACTTTGACATAAAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCAC 544

Qy        1200 AAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAG 1259
               ||| | || || || |||||||  ||| |||||||| ||||| ||  | ||||| |||||
Db        545 AAGAAAGACATCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAA 604

Qy        1260 GGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTT 1319
               ||||| ||    || | |||| | || || || || ||  |    ||  | || || ||
Db        605 GGCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTC 664

Qy        1320 TCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACAT 1379
               || ||| | || || ||  |||||| |      |  || |   | ||||| ||| |  |
Db        665 TCCATCAGGCTCGTGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTAC 724

Qy        1380 CTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTA 1439
               ||     |  |||  |  ||  |   ||  |||| || |    || | ||||   |
Db        725 CTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCAC 784

Qy        1440 GGACTACACCCGTGGATTGCAAATATTGATGACACC-CAGTATCTCGCAGCAAAAAGAGC 1498
               ||     | || ||| |  |  |   |  | || || || || || || || |  | ||||||
Db        785 GGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCCTCATTACCTGGCTGGGAGAAGAGC 844

Qy        1499 GATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAAT 1558
               || |  ||||| |||||    || |||||  ||| | |||| ||   ||  |||||  |
Db        845 CATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGT 904

Qy        1559 TGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGT 1618
                ||   |  || ||||||  |     |||| |||  ||||  | ||  ||||  | |
Db        905 GACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGC 964

Qy        1619 TGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAAC 1678
               ||||| ||||  || || |||||||| ||  |||||||||  ||||||||||||||||||
Db        965 GGATGACGGAGCCCACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAAC 1024

Qy        1679 CAAATTATTTGCTGCCT 1695
               |||  |  | || || |
Db        1025 CAAGATGCTGGCCGCGT 1041
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RESULT 61
ACC72762
ID ACC72762 standard; cDNA; 2349 BP.
XX
AC ACC72762;
XX
DT 09-JUL-2003 (first entry)
XX
DE Human cancer related protein encoding cDNA SEQ ID NO:101.
XX
KW Human; cancer; diagnosis; screening; modulator; leukaemia; ischaemia;
KW heart disease; atherosclerosis; endometriosis; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003025138-A2.
XX
PD 27-MAR-2003.
XX
PF 17-SEP-2002; 2002WO-US029560.
XX
PR 17-SEP-2001; 2001US-0323469P.
PR 20-SEP-2001; 2001US-0323887P.
PR 13-NOV-2001; 2001US-0350666P.
PR 08-FEB-2002; 2002US-0355145P.
PR 08-FEB-2002; 2002US-0355257P.
PR 12-APR-2002; 2002US-0372246P.
XX
PA (EOSB-) EOS BIOTECHNOLOGY INC.
XX
PI Afar D, Aziz N, Gish KC, Hevezi PA, Mack DH, Wilson KE;
PI Zlotnik A;
XX
DR WPI; 2003-354600/33.
DR P-PSDB; ABR58615.
XX
PT New genes that are up-regulated or down-regulated in cancers, useful as
PT markers for diagnosing e.g. cancer, ischemia or heart diseases, or as
PT therapeutic targets for screening drugs for treating these diseases.
XX
PS Claim 8; Page 677; 767pp; English.
XX
CC The present invention describes an isolated nucleic acid molecule, which
CC comprises the sequence of any of the genes that are up-regulated or down-
CC regulated in specific cancers (e.g. about 1031 genes up-regulated in
CC acute lymphocytic leukemia). ACC72641 to ACC72860 represent cancer
CC related gene nucleotide sequences which encode the proteins given in
CC ABR58521 to ABR58709. Also described: (1) determining the presence or
CC absence of a pathological cell in a patient; (2) an expression vector
CC comprising a nucleic acid molecule described above; (3) a host cell
CC comprising the vector; (4) an isolated polypeptide, which is encoded by
CC the nucleic acid; (5) an antibody that specifically binds the polypeptide
CC of (4); (6) specifically targeting a compound to a pathological cell in a
CC patient by administering to the patient the antibody above; and (7) a
CC drug screening assay. The nucleic acid is useful as diagnostic markers or
CC therapeutic targets. In particular, the nucleic acid is useful for
CC diagnosing a pathology, e.g. cancer (e.g. cancer of the bone marrow,
CC bladder, brain, breast, cervix, colon/rectum, kidney, lung, ovary,
CC pancreas, prostate, skin and uterus), wounds, ischaemia, heart diseases,
CC atherosclerosis and endometriosis. The nucleic acid is also useful in
CC drug screening, particularly for identifying agents for treating these
CC pathologies
XX
SQ Sequence 2349 BP; 607 A; 566 C; 640 G; 536 T; 0 U; 0 Other;

Query Match 14.9%; Score 334.8; DB 10; Length 2349;
Best Local Similarity 58.7%; Pred. No. 3.1e-63;
Matches 579; Conservative 0; Mismatches 407; Indels 0; Gaps 0;

```
Qy        754 AAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTG 813
              | ||  |||||||  ||  ||  ||||  | | || || ||||| ||| | |||||||  |
Db        295 AGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGG 354

Qy        814 CCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTG 873
               ||| || || ||  |           || |||  ||||||    | |||||||||  |
Db        355 GCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTATGTCT 414

Qy        874 TAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGG 933
               ||||| || ||    ||| |  |  | | ||||||    |||||  || ||   | |||
Db        415 GCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGGG 474

Qy        934 GGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCT 993
               | |  |||||||  |  | ||||||  | |||||  || | ||  | || || ||    |
Db        475 GCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCATTCTGGGGTGT 534

Qy        994 TTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAG 1053
               || |||    | |||||  | ||| |||||||  ||   ||  | ||     |||| |
Db        535 ACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGGCTCTTTGGTGG 594
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Qy       1054 ACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAG 1113
             ||  |   ||  | |||||| |||| || ||  | || |  ||||   |  | || ||||
Db        595 ACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCGTGGCCGCCGTCACGGAAG 654

Qy       1114 AGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCC 1173
             ||||    ||    ||| | | |||| |  | ||| |||| || |      ||
Db        655 AGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTTGCCAAGGATGTGG 714

Qy       1174 GGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACC 1233
             |||   |||   | |||  |      ||| | || || || |||||||  ||| ||||||
Db        715 GGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCACCGATGGCGGTACC 774

Qy       1234 CATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCA 1293
             | |||||| ||  | ||||| ||||| ||||| ||   || | ||||  | || || || |
Db        775 CGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGA 834

Qy       1294 TACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTG 1353
             | ||  |    ||  | || || || || ||| | || || ||  |||||| |      |
Db        835 TTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAACATGACTCCTGAAG 894

Qy       1354 CGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCA 1413
               || |  | ||||| ||| |  | ||     |   |||  |  ||  |   ||  |||
Db        895 TCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCA 954

Qy       1414 ACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACA 1473
             |  || |    || | ||||   |  ||     | || ||| |  |  |  |   | ||
Db        955 ATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACC 1014

Qy       1474 CCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGA 1533
             | || || || || |  | |||||| || |  |||| ||||     || |||||  |||
Db       1015 CTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGA 1074

Qy       1534 TCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCG 1593
               | |||| ||   ||  |||||  |  ||   |  || ||||||  |     |||||  ||
Db       1075 CCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACG 1134

Qy       1594 TGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCA 1653
             |  ||||  | ||  ||||  | |  ||||| |||| || || |||||||| ||  |||
Db       1135 TCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAGAATGAAAAGCTCA 1194

Qy       1654 ACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCC 1713
             ||||||  |||||||||||||||||||||  |  | || || |   | |  ||| |  |||
Db       1195 ACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCTGTATGAGGTCTCCC 1254

Qy       1714 AGCTCCATTAATCACAAGAACCTTCT 1739
             ||||  |  | |     | || |||
Db       1255 AGCTGAAGGACTAGGCCAAGCCCTCT 1280
```

RESULT 62
AAC77081
ID AAC77081 standard; cDNA; 1185 BP.
XX
AC AAC77081;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human ORFX ORF2636 polynucleotide sequence SEQ ID NO:5271.
XX
KW Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW cholesterol ester storage; systemic lupus erythematosus; infection;
KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW thrombosis; contraceptive; ss.
XX
OS Homo sapiens.
XX
PN WO200058473-A2.
XX
PD 05-OCT-2000.
XX
PF 31-MAR-2000; 2000WO-US008621.
XX
PR 31-MAR-1999; 99US-0127607P.
PR 02-APR-1999; 99US-0127636P.
PR 05-APR-1999; 99US-0127728P.
PR 30-MAR-2000; 2000US-00540763.
XX
PA (CURA-) CURAGEN CORP.
XX
PI Shimkets RA, Leach M;
XX
DR WPI; 2000-602362/57.
DR P-PSDB; AAB42872.
XX
PT Novel nucleic acids and peptides derived from open reading frame X,
PT useful for treating e.g. cancers, proliferative disorders,
PT neurodegenerative disorders and cardiovascular disease.
XX
PS Claim 5; Page 4443-4444; 5507pp; English.
XX
CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
CC anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
CC cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
CC dermatological; immunosuppressive; antiinflammatory; antibacterial;
CC antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The
CC sequences can be used for determining the presence of or predisposition
CC to, or preventing or treating pathological conditions associated with an
CC ORFX-associated disorder. The nucleic acids can be used to express ORFX
CC proteins in gene therapy vectors. The proteins and nucleic acids may be
CC used to treat cancers, proliferative disorders, neurodegenerative
CC disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
CC diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
CC storage, systemic lupus erythematosus, severe combined immunodeficiency
CC (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
CC disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
CC cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
CC enhance coagulation; to inhibit thrombosis; and as a contraceptive
XX
SQ Sequence 1185 BP; 273 A; 297 C; 360 G; 254 T; 0 U; 1 Other;

Query Match 14.5%; Score 325.6; DB 3; Length 1185;
Best Local Similarity 58.9%; Pred. No. 2.6e-61;
Matches 581; Conservative 0; Mismatches 399; Indels 6; Gaps 1;

```
Qy        351 CAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTC 410
              ||||  ||      | |||||||| ||| |||| |  ||||    ||| | |
Db        205 CAGAAACTCGCAAAATGGGTGGCTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAG 258

Qy        411 AGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCC 470
              |||   ||  ||   || |||||||  || |||||  |       |  |||   |||||| |
Db        259 AGAGGCGAAATCAGGAGGATGATGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGC 318

Qy        471 CGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATA 530
                |||||    |||||| || ||    ||  |||| || |||||   |    | ||  |
Db        319 TCTGTGGAACTGGTGGATATCGGAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTC 378

Qy        531 CCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTAC 590
              |||||  |  | || | |   |||||   ||| ||   |||    |||||||| | |||
Db        379 CCTCCTATTCTGCTCGGCAGGCTGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTAC 438

Qy        591 GGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTG 650
              || ||| |||| |||||||||||| | || ||  || || |||  ||  || ||||
Db        439 GGGCACCTGGATGTGCAGCCTGCAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACC 498
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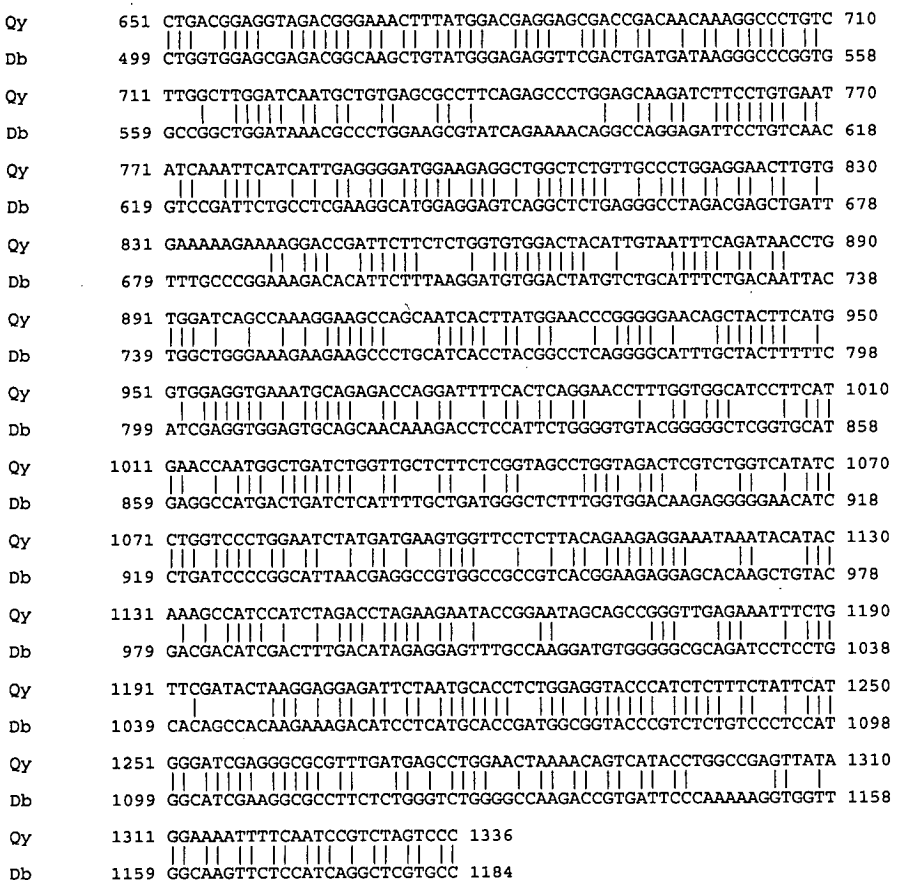
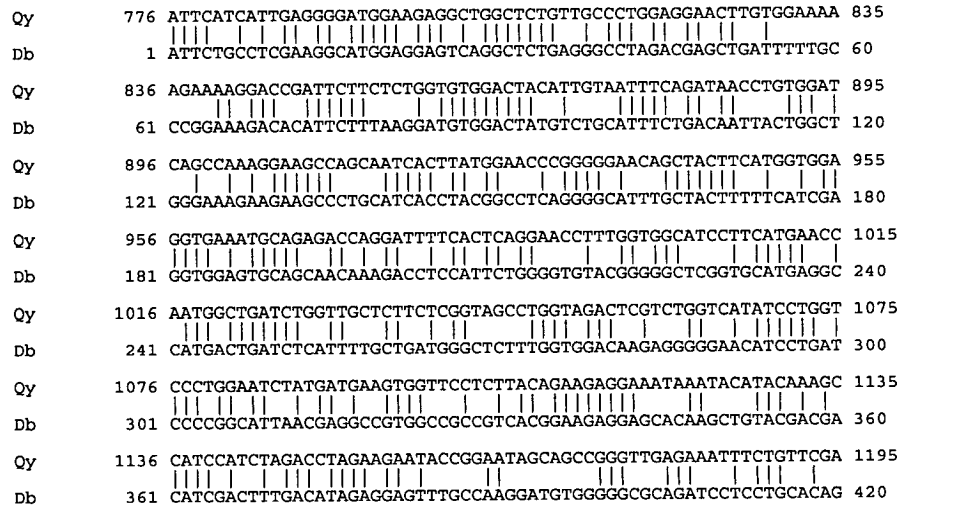


RESULT 63
AAH14097
ID AAH14097 standard; cDNA; 2005 BP.
XX
AC AAH14097;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA sequence SEQ ID NO:11267.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 11267; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 2005 BP; 496 A; 498 C; 547 G; 464 T; 0 U; 0 Other;

Query Match 14.5%; Score 325.6; DB 4; Length 2005;
Best Local Similarity 58.6%; Pred. No. 3.1e-61;
Matches 565; Conservative 0; Mismatches 399; Indels 0; Gaps 0;



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Qy       1196 TACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGAT 1255
Db        421 CCACAAGAAAGACATCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCAT 480

Qy       1256 CGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAA 1315
Db        481 CGAAGGCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTCGGCAA 540

Qy       1316 ATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACG 1375
Db        541 GTTCTCCATCAGGCTCGTGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAG 600

Qy       1376 ACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGAC 1435
Db        601 CTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGG 660

Qy       1436 TCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAG 1495
Db        661 CCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAG 720

Qy       1496 AGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCC 1555
Db        721 AGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCC 780

Qy       1556 AATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGC 1615
Db        781 CGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTC 840

Qy       1616 TGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGG 1675
Db        841 AGCGGATGACGGAGCCCACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGG 900

Qy       1676 AACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAGCTCCATTAATCACAAGAACC 1735
Db        901 AACCAAGATGCTGGCCGCGTACCTGTATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCC 960

Qy       1736 TTCT 1739
Db        961 CTCT 964
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```
RESULT 64
ACC60995
ID   ACC60995 standard; DNA; 1446 BP.
XX
AC   ACC60995;
XX
DT   20-JUN-2003  (first entry)
XX
DE   Gene sequence #SEQ ID 772.
XX
KW   Multiprotein complex; eukaryote; drug target; diagnosis; gene; ds.
XX
OS   Saccharomyces cerevisiae.
XX
PN   EP1258494-A1.
XX
PD   20-NOV-2002.
XX
PF   20-DEC-2001; 2001EP-00130253.
XX
PR   15-MAY-2001; 2001EP-00111774.
XX
PA   (CELL-) CELLZOME AG.
XX
PI   Bauer A,  Gavin A,  Grandi P,  Krause R,  Kruse UD,  Kuester BD;
PI   Marzioch M,  Schultz JD,  Superti-Furga GD;
XX
DR   WPI; 2003-250078/25.
DR   P-PSDB; ABR52953.
XX
PT   New isolated protein complexes useful for diagnosing a disease or
PT   disorder, or as a target for an active agent of a pharmaceutical,
PT   preferably a drug target in the treatment or prevention of disease or
PT   disorder.
XX
PS   Disclosure; SEQ ID NO 772; 17pp + Sequence Listing; English.
XX
CC   The invention relates to multiprotein complexes from eukaryotes. Proteins
CC   of the invention and DNA sequences encoding them are given in records
CC   ABR52568-ABR53903 and ACC60610-ACC61944 respectively. The complexes are
CC   obtainable by using a protein as a bait and isolating the set of proteins
CC   which is attached thereto from cells. Such protein complexes may comprise
CC   up to 30 distinct proteins. Protein complexes of the invention are useful
CC   for diagnosing a disease or disorder, or as a target for an active agent
CC   of a pharmaceutical, preferably a drug target in the treatment or
CC   prevention of a disease or disorder. Note: The sequence data for this
CC   patent is not represented in the printed specification, but is based on
CC   sequence information supplied by the European Patent Office. The complete
CC   document is available on CD-ROM
XX
SQ   Sequence 1446 BP; 392 A; 295 C; 325 G; 434 T; 0 U; 0 Other;
```

Query Match 13.6%; Score 304.2; DB 10; Length 1446;
Best Local Similarity 54.2%; Pred. No. 1.4e-56;
Matches 643; Conservative 0; Mismatches 538; Indels 6; Gaps 1;

```
Qy        519 AGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACC 578
Db        229 AATCTGTCTCTACCTCCTGTGATTCTGTCTAGGTTCGGCAGCGACCCTTCAAAAAAGACT 288

Qy        579 GTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACG 638
Db        289 GTGTTGGTTTACGGTCACTATGATGTGCAACCTGCTCAATTGGAAGATGGTTGGGATACT 348

Qy        639 GACCCCT------ATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACC 692
Db        349 GAGCCATTCAAGCTTGTCATTGATGAGGCTAAAGGTATCATGAAAGGAAGGGGTGTCACC 408

Qy        693 GACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAG 752
Db        409 GATGACACTGGTCCCTTATTATCTTGGATTAACGTTGTGGACGCCTTCAAAGCCTCCGGA 468

Qy        753 CAAGATCTTCCTGTGAAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTT 812
Db        469 CAAGAATTCCCCGTTAACTTAGTTACTTGTTTCGAAGGAATGGAGGAAAGTGGTTCTTTG 528

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
Db        529 AAATTGGATGAATTGATTAAAAAGGAAGCTAATGGTTACTTTAAAGGTGTAGATGCCGTT 588

Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
Db        589 TGTATTTCCGATAATTACTGGCTAGGCACTAAGAAGCCTGTTTTGACTTATGGTCTAAGA 648

Qy        933 GGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACC 992
Db        649 GGTTGCAACTACTATCAAACCATCATTGAGGGTCCAAGTGCAGATTTACACTCTGGTATC 708

Qy        993 TTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTA 1052
Db        709 TTTGGTGGTGTTGTTGCTGAACCAATGATCGATTTAATGCAAGTTCTCGGTTCCCTTGTG 768

Qy       1053 GACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAA 1112
Db        769 GATTCTAAGGGTAAGATCCTGATTGACGGTATTGACGAAATGGTTGCTCCTCTAACCGAA 828

Qy       1113 GAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGC 1172
Db        829 AAGGAGAAGGCTCTATACAAGGATATCGAATTTAGCGTCGAAGAATTGAACGCTGCAACT 888

Qy       1173 CGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTAC 1232
Db        889 GGCTCTAAGACAAGTTTGTACGACAAGAAGGAAGACATCTTGATGCACAGATGGAGGTAT 948
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```
Qy       1233 CCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTC 1292
Db        949 CCTTCGTTGTCCATTCATGGTGTGGAAGGCGCCTTTTCCGCTCAAGGTGCAAAGACTGTC 1008

Qy       1293 ATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCT 1352
Db       1009 ATTCCAGCTAAGGTCTTCGGTAAGTTTTCCATTAGAACCGTCCCCGACATGGATTCTGAG 1068

Qy       1353 GCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCC 1412
Db       1069 AAACTGACCTCTTTGGTCCAGAAGCATTGTGATGCCAAATTCAAGTCCTTGAACTCTCCA 1128

Qy       1413 AACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGAC 1472
Db       1129 AACAAGTGCAGAACAGAATTGATCCATGATGGTGCTTATTGGGTTTCTGATCCATTCAAC 1188

Qy       1473 ACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATG 1532
Db       1189 GCCCAATTTACTGCTGCTAAAAAGGCCACAAAACTGGTCTATGGTGTCGATCCTGATTTT 1248

Qy       1533 ATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGC 1592
Db       1249 ACCAGGGAAGGTGGTTCCATTCCTATCACTTTGACTTTCCAAGATGCCTTGAACACTAGT 1308

Qy       1593 GTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATC 1652
Db       1309 GTCTTATTGCTGCCAATGGGTAGAGGCGATGATGGTGCTCATTCAATCAATGAAAAGTTA 1368

Qy       1653 AACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTT 1699
Db       1369 GATATTTCAAATTTTGTTGGTGGTATGAAGACGATGGCTGCTTACTT 1415
```

RESULT 65
ADK62621
ID ADK62621 standard; DNA; 1446 BP.
XX
AC ADK62621;
XX
DT 06-MAY-2004 (first entry)
XX
DE Disease treating protein complex-derived gene #436.
XX
KW protein complex; drug target; diagnosis; gene; ds.
XX
OS Unidentified.
XX
PN EP1338608-A2.
XX
PD 27-AUG-2003.
XX
PF 20-DEC-2002; 2002EP-00102902.
XX
PR 20-DEC-2001; 2001EP-00130253.
XX
PA (CELL-) CELLZOME AG.
XX
PI Bauer A, Gavin A, Superti-Furga G, Kuester B, Schultz J;
PI Marzioch M, Grandi P, Krause R, Kruse U, Merino A, Bauch A;
PI Michon A, Leutwein C, Rick J;
XX
DR WPI; 2003-638460/61.
DR P-PSDB; ADK62620.
XX
PT New proteins and protein complexes from eukaryotes, useful as targets in
PT drug screening, or in diagnosing or screening for the presence of a
PT disease or disorder, or a predisposition for developing a disease or
PT disorder in a subject.
XX
PS Disclosure; SEQ ID NO 872; 13pp; English.
XX
CC The invention relates to novel protein complexes comprising a first and a
CC second protein, or its derivative, fragment, homologue or variant. The
CC proteins are selected from given protein complexes, which are not defined
CC in the specification. The variants are encoded by nucleic acids that
CC hybridize to the nucleic acids encoding the proteins under low stringency
CC conditions. The protein complexes are useful as targets for an active
CC agent of a pharmaceutical. These protein complexes are particularly
CC useful as drugs targets for the treatment or preventing of a disease or
CC disorder. The complexes and methods above are useful in diagnosing or
CC screening for the presence of a disease or disorder or a predisposition
CC for developing a disease or disorder in a subject. These are also useful
CC in screening for a drug for treatment or prevention of a disease or
CC disorder. The molecule that modulates the amount, activity or protein
CC components of the complex is useful for the manufacture of a medicament
CC for the treatment or prevention of a disease or disorder. This sequence
CC corresponds to a gene of the invention. (Note: the sequence data for this
CC patent did not form part of the printed specification but was obtained
CC from the EPO in electronic format).
XX
SQ Sequence 1446 BP; 392 A; 295 C; 325 G; 434 T; 0 U; 0 Other;

Query Match 13.6%; Score 304.2; DB 10; Length 1446;
Best Local Similarity 54.2%; Pred. No. 1.4e-56;
Matches 643; Conservative 0; Mismatches 538; Indels 6; Gaps 1;

```
Qy        519 AGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACC 578
Db        229 AATCTGTCTCTACCTCCTGTGATTCTGTCTAGGTTCGGCAGCGACCCTTCAAAAAAGACT 288

Qy        579 GTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACG 638
Db        289 GTGTTGGTTTACGGTCACTATGATGTGCAACCTGCTCAATTGGAAGATGGTTGGGATACT 348

Qy        639 GACCCCT------ATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACC 692
Db        349 GAGCCATTCAAGCTTGTCATTGATGAGGCTAAAGGTATCATGAAAGGAAGGGGTGTCACC 408

Qy        693 GACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAG 752
Db        409 GATGACACTGGTCCCTTATTATCTTGGATTAACGTTGTGGACGCCTTCAAAGCCTCCGGA 468

Qy        753 CAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTT 812
Db        469 CAAGAATTCCCCGTTAACTTAGTTACTTGTTTCGAAGGAATGGAGGAAAGTGGTTCTTTG 528

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
Db        529 AAATTGGATGAATTGATTAAAAAGGAAGCTAATGGTTACTTTAAAGGTGTAGATGCCGTT 588

Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
Db        589 TGTATTTCCGATAATTACTGGCTAGGCACTAAGAAGCCTGTTTTGACTTATGGTCTAAGA 648

Qy        933 GGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACC 992
Db        649 GGTTGCAACTACTATCAAACCATCATTGAGGGTCCAAGTGCAGATTTACACTCTGGTATC 708

Qy        993 TTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTA 1052
Db        709 TTTGGTGGTGTTGTTGCTGAACCAATGATCGATTTAATGCAAGTTCTCGGTTCCCTTGTG 768

Qy       1053 GACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAA 1112
Db        769 GATTCTAAGGGTAAGATCCTGATTGACGGTATTGACGAAATGGTTGCTCCTCTAACCGAA 828

Qy       1113 GAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGC 1172
Db        829 AAGGAGAAGGCTCTATACAAGGATATCGAATTTAGCGTCGAAGAATTGAACGCTGCAACT 888

Qy       1173 CGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTAC 1232
Db        889 GGCTCTAAGACAAGTTTGTACGACAAGAAGGAAGACATCTTGATGCACAGATGGAGGTAT 948

Qy       1233 CCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTC 1292
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Db        949 CCTTCGTTGTCCATTCATGGTGTGGAAGGCGCCTTTTCCGCTCAAGGTGCAAAGACTGTC 1008

Qy       1293 ATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCT 1352

Db       1009 ATTCCAGCTAAGGTCTTCGGTAAGTTTTCCATTAGAACCGTCCCCGACATGGATTCTGAG 1068

Qy       1353 GCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCC 1412

Db       1069 AAACTGACCTCTTTGGTCCAGAAGCATTGTGATGCCAAATTCAAGTCCTTGAACTCTCCA 1128

Qy       1413 AACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGAC 1472

Db       1129 AACAAGTGCAGAACAGAATTGATCCATGATGGTGCTTATTGGGTTTCTGATCCATTCAAC 1188

Qy       1473 ACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATG 1532

Db       1189 GCCCAATTTACTGCTGCTAAAAAGGCCACAAAACTGGTCTATGGTGTCGATCCTGATTTT 1248

Qy       1533 ATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGC 1592

Db       1249 ACCAGGGAAGGTGGTTCCATTCCTATCACTTTGACTTTCCAAGATGCCTTGAACACTAGT 1308

Qy       1593 GTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATC 1652

Db       1309 GTCTTATTGCTGCCAATGGGTAGAGGCGATGATGGTGCTCATTCAATCAATGAAAAGTTA 1368

Qy       1653 AACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTT 1699

Db       1369 GATATTTCAAATTTTGTTGGTGGTATGAAGACGATGGCTGCTTACTT 1415


RESULT 66
AAC09875
ID   AAC09875 standard; cDNA; 300 BP.
XX
AC   AAC09875;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 13950.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 1; SEQ ID NO 13950; 71pp + Sequence Listing; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC   identified within the present sequence. The 5' ESTs were prepared from
CC   total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC   sequences usually correspond mainly to the 3' untranslated region (UTR)
CC   of the mRNA because they are often obtained from oligo-dT primed cDNA
CC   libraries. Such ESTs are not well suited for isolating cDNA sequences
CC   derived from the 5' ends of mRNAs and even in those cases where longer
CC   cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC   ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC   to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC   diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC   They are used to obtain upstream regulatory sequences and to design
CC   expression and secretion vectors
XX
SQ   Sequence 300 BP; 56 A; 88 C; 77 G; 75 T; 0 U; 4 Other;

  Query Match            13.1%;  Score 292.8;  DB 3;  Length 300;
  Best Local Similarity   98.3%;  Pred. No. 2.7e-54;
  Matches  291;  Conservative    4;  Mismatches    1;  Indels    0;  Gaps    0;

Qy          1 GAATGAATACCTCCGAAGCCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCC 60

Db          5 GARTGAATACCTCCGAAGCCGCTTTGTTCTCCAGATGTGAATAGCTCCACTATACCAGCC 64

Qy         61 TCGTCTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 120

Db         65 TCRWMTTCCTTCCGGGGGGACAACGTGGGTCAGGGCACAGAGAGATATTTAATGTCACCCT 124

Qy        121 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 180

Db        125 CTTGGGGCTTTCATGGGACTCCCTCTGCCACATTTTTTGGAGGTTGGGAAAGTTGCTAGA 184

Qy        181 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCGGGAGAATGGCTGCGTCCCTGCTGG 240

Db        185 GGCTTCAGAACTCCAGCCTAATGGATCCCAAACTCAGGAGAATGGCTGCGTCCCTGCTGG 244

Qy        241 CTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCG 296

Db        245 CTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACCCTCCCCGCCCCCG 300


RESULT 67
AAH14944
ID   AAH14944 standard; cDNA; 1920 BP.
XX
AC   AAH14944;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human cDNA sequence SEQ ID NO:12848.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-00116126.
XX
PR   29-JUL-1999;   99JP-00248036.
PR   27-AUG-1999;   99JP-00300253.
PR   11-JAN-2000; 2000JP-00118776.
PR   02-MAY-2000; 2000JP-00183767.
PR   09-JUN-2000; 2000JP-00241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT   length cDNAs defined in the specification, and for the detection and/or
PT   diagnosis of the abnormality of the proteins encoded by the full-length
PT   cDNAs.
XX
```

PS Claim 8; SEQ ID NO 12848; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 1920 BP; 476 A; 480 C; 520 G; 444 T; 0 U; 0 Other;

Query Match 12.5%; Score 281; DB 4; Length 1920;
Best Local Similarity 58.2%; Pred. No. 1.9e-51;
Matches 512; Conservative 0; Mismatches 365; Indels 2; Gaps 1;

```
Qy        863 GGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTA 922
              ||||||  |    |||||  || ||    |||  |  |  | | ||||||    |||||  ||
Db          1 GGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTA 60

Qy        923 TGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCA 982
               ||   | |||| |   |||||||  |  | ||||||  | |||||  || | ||  | ||
Db         61 CGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCA 120

Qy        983 CTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGG 1042
              || ||    |  || |||    | ||||||  | ||| |||||||  ||    ||  | ||
Db        121 TTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGG 180

Qy       1043 TAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCC 1102
                |||| |||  |   ||  | |||||| |||| || ||  | || |   |||   |
Db        181 CTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCATGGCCGC 240

Qy       1103 TCTTACAGAA--GAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 1160
               | || |||   ||||    ||   ||| | | |||| |  | ||| |||| || |
Db        241 CGTCACGGAAATCAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTT 300

Qy       1161 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1220
                ||          |||   |||   | |||  |       ||| | || || || ||||||
Db        301 GCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCAC 360

Qy       1221 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1280
              |  ||| |||||| |||| ||  | ||||| |||| |||| ||   || | ||||
Db        361 CGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGGG 420

Qy       1281 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1340
               | || || || || ||  |    ||  | || || || || ||| | || || ||  ||
Db        421 GCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAAC 480

Qy       1341 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1400
              ||||  |      |  || |   | |||||  ||| |  | ||      |   |||  |  ||
Db        481 ATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAA 540

Qy       1401 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1460
                |   ||  ||||  || |    || | ||||   |  ||     | || ||| |  |
Db        541 CTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCC 600

Qy       1461 AATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACA 1520
                |  |   | || | || || || || |  | |||||| || || |||||  |||||
```

```
Db        601 GACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAGGACAGTTTTTGGTGTT 660

Qy       1521 GAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATC 1580
              || |||||  ||| | |||| ||    ||  |||||  |  ||    |  || ||||||  |
Db        661 GAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCC 720

Qy       1581 GTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAG 1640
                   ||||| ||| ||||  | ||  ||||  | |  ||||| ||||  || || |||
Db        721 ACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAG 780

Qy       1641 AATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1700
              ||||| ||  |||||||||  ||||||||||||||||||||  |  | || || |  |
Db        781 AATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCTG 840

Qy       1701 TTAGAGATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
              |  ||| |  |||||||  |  | |      | || |||
Db        841 TATGAGGTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 879
```

RESULT 68
ABL18866/c
ID ABL18866 standard; DNA; 3538 BP.
XX
AC ABL18866;
XX
DT 26-MAR-2002 (first entry)
XX
DE Drosophila melanogaster genomic polynucleotide SEQ ID NO 8071.
XX
KW Drosophila; developmental biology; cell signalling; insecticide;
KW pharmaceutical; gene; ds.
XX
OS Drosophila melanogaster.
XX
PN WO200171042-A2.
XX
PD 27-SEP-2001.
XX
PF 23-MAR-2001; 2001WO-US009231.
XX
PR 23-MAR-2000; 2000US-0191637P.
PR 11-JUL-2000; 2000US-00614150.
XX
PA (PEKE) PE CORP NY.
XX
PI Venter JC, Adams M, Li PWD, Myers EW;
XX
DR WPI; 2001-656860/75.
XX
PT New isolated nucleic acid detection reagent for detecting 1000 or more
PT genes from Drosophila and for elucidating cell signaling and cell-cell
PT interactions.
XX
PS Claim 1; SEQ ID NO 8071; 21pp + Sequence Listing; English.
XX
CC The invention relates to an isolated nucleic acid detection reagent
CC capable of detecting 1000 or more genes from Drosophila. The invention is
CC useful in developmental biology and in elucidating cell signalling and
CC cell-cell interactions in higher eukaryotes for the development of
CC insecticides, therapeutics and pharmaceutical drugs. The invention
CC discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC ABB72072). The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 3538 BP; 1035 A; 723 C; 651 G; 1129 T; 0 U; 0 Other;

Query Match 10.0%; Score 224.2; DB 4; Length 3538;
Best Local Similarity 58.0%; Pred. No. 6.6e-39;
Matches 397; Conservative 0; Mismatches 288; Indels 0; Gaps 0;

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Qy        412 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 471
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Db       2456 GAGGCGAGATCGGTCGTATGGTGGAATGGACCGCGGATCGGCTGAGGTCTCTGGGCGCCG 2397

Qy        472 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATAC 531

Db       2396 AGACAGAGCTGGCAGATGTGGGTCAGCAGACTTTGCCGAACGGCCAGATTATACCTCTAC 2337

Qy        532 CTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACG 591

Db       2336 CAAAGGTTCTGCTGGGAACTTTGGGCAAAGACCCCTCTAAGAAGACCGTGTTGGTCTATG 2277

Qy        592 GCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGC 651

Db       2276 GTCATTTGGATGTGCAGCCCGCCCTGAAGGAAGATGGATGGAACACCAATCCCTTTGAGC 2217

Qy        652 TGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCT 711

Db       2216 TTACAGAGGTGGATGGAAAACTGTTTGGACGCGGGGCATCCGACGACAAGGGACCTGTTC 2157

Qy        712 TGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATA 771

Db       2156 TGTGCTGGATCCACGCTATCGAAGCTTATCAGAAGCTCAACATTGCACTGCCTGTGAATG 2097

Qy        772 TCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGG 831

Db       2096 TTAAATTCGTATTTGAGGGAATGGAGGAAAGCGGCAGCGAAGGCCTCGATGACTTGTTAT 2037

Qy        832 AAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGT 891

Db       2036 TGGAACGTAAAGATAATTTCTTAGCGGATGTTGATTTTGTTTGCATATCCGATAACTACT 1977

Qy        892 GGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGG 951

Db       1976 GGCTTGGAAAAAAACGCCCTTGCCTCACATATGGGCTTCGCGGTTTGGCATACTTTCAAG 1917

Qy        952 TGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATG 1011

Db       1916 TGGAGGTGGAATGCTCCAGCAAAGACTTGCATAGTGGAGTTTTTGGGGGTACAGTTCACG 1857

Qy       1012 AACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCC 1071

Db       1856 AAGCAATGCCGGATCTGTGTCATTTGCTGAGCATTCTTGTCGATAAAGATACAAATATCC 1797

Qy       1072 TGGTCCCTGGAATCTATGATGAAGT 1096

Db       1796 TAGTCCCTGGTGTGGATCGCGACGT 1772


RESULT 69
ABL18870/c
ID   ABL18870 standard; DNA; 4027 BP.
XX
AC   ABL18870;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster genomic polynucleotide SEQ ID NO 8083.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical; gene; ds.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009231.
XX
PR   23-MAR-2000; 2000US-0191637P.
PR   11-JUL-2000; 2000US-00614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signaling and cell-cell
PT   interactions.
XX
PS   Claim 1; SEQ ID NO 8083; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC   ABB72072). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 4027 BP; 1205 A; 797 C; 729 G; 1296 T; 0 U; 0 Other;

  Query Match            10.0%;  Score 224.2;  DB 4;  Length 4027;
  Best Local Similarity  58.0%;  Pred. No. 6.8e-39;
  Matches  397;  Conservative    0;  Mismatches  288;  Indels    0;  Gaps    0;

Qy        412 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 471

Db       2456 GAGGCGAGATCGGTCGTATGGTGGAATGGACCGCGGATCGGCTGAGGTCTCTGGGCGCCG 2397

Qy        472 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATAC 531

Db       2396 AGACAGAGCTGGCAGATGTGGGTCAGCAGACTTTGCCGAACGGCCAGATTATACCTCTAC 2337

Qy        532 CTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACG 591

Db       2336 CAAAGGTTCTGCTGGGAACTTTGGGCAAAGACCCCTCTAAGAAGACCGTGTTGGTCTATG 2277

Qy        592 GCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGC 651

Db       2276 GTCATTTGGATGTGCAGCCCGCCCTGAAGGAAGATGGATGGAACACCAATCCCTTTGAGC 2217

Qy        652 TGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCT 711

Db       2216 TTACAGAGGTGGATGGAAAACTGTTTGGACGCGGGGCATCCGACGACAAGGGACCTGTTC 2157

Qy        712 TGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATA 771

Db       2156 TGTGCTGGATCCACGCTATCGAAGCTTATCAGAAGCTCAACATTGCACTGCCTGTGAATG 2097

Qy        772 TCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGG 831

Db       2096 TTAAATTCGTATTTGAGGGAATGGAGGAAAGCGGCAGCGAAGGCCTCGATGACTTGTTAT 2037

Qy        832 AAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGT 891

Db       2036 TGGAACGTAAAGATAATTTCTTAGCGGATGTTGATTTTGTTTGCATATCCGATAACTACT 1977

Qy        892 GGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGG 951

Db       1976 GGCTTGGAAAAAAACGCCCTTGCCTCACATATGGGCTTCGCGGTTTGGCATACTTTCAAG 1917

Qy        952 TGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATG 1011

Db       1916 TGGAGGTGGAATGCTCCAGCAAAGACTTGCATAGTGGAGTTTTTGGGGGTACAGTTCACG 1857

Qy       1012 AACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCC 1071

Db       1856 AAGCAATGCCGGATCTGTGTCATTTGCTGAGCATTCTTGTCGATAAAGATACAAATATCC 1797

Qy       1072 TGGTCCCTGGAATCTATGATGAAGT 1096
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Db       1796 TAGTCCCTGGTGTGGATCGCGACGT 1772
```

RESULT 70
AAH05416
ID AAH05416 standard; cDNA; 774 BP.
XX
AC AAH05416;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA clone (5'-primer) SEQ ID NO:2251.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 1; SEQ ID NO 2251; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 774 BP; 180 A; 196 C; 228 G; 167 T; 0 U; 3 Other;

Query Match 9.9%; Score 222; DB 4; Length 774;
Best Local Similarity 56.7%; Pred. No. 1.2e-38;
Matches 408; Conservative 0; Mismatches 311; Indels 0; Gaps 0;

```
Qy        776 ATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAA 835
Db          1 ATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGC 60

Qy        836 AGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGAT 895
Db         61 CCGGAAAGACACATTCTTTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCT 120

Qy        896 CAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGA 955
Db        121 GGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGGGGCATTTGCTACTTTTTCATCGA 180

Qy        956 GGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACC 1015
Db        181 GGTGGAGTGCAGCAACAAAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGC 240

Qy       1016 AATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGT 1075
Db        241 CATGACTGATCTCATTTTGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGAT 300

Qy       1076 CCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGC 1135
Db        301 CCCCGGCATTAACGAGGCCGTGGCCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGA 360

Qy       1136 CATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGA 1195
Db        361 CATCGACTTTGACATAGAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAG 420

Qy       1196 TACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGAT 1255
Db        421 CCACAAGAAAGACATCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCAT 480

Qy       1256 CGAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAA 1315
Db        481 CGAAGGCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTCGGCAA 540

Qy       1316 ATTTTCAATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACG 1375
Db        541 GTTCTCCATCAGGCTCGTGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAG 600

Qy       1376 ACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGAC 1435
Db        601 CTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGG 660

Qy       1436 TCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAA 1494
Db        661 CCACGGTGGGAAGCCCTGGGTCTNCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAA 719
```

RESULT 71
AAD33887
ID AAD33887 standard; DNA; 594 BP.
XX
AC AAD33887;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #4.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX

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PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 4; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 594 BP; 137 A; 146 C; 189 G; 122 T; 0 U; 0 Other;

  Query Match             9.2%;  Score 205.4;  DB 6;  Length 594;
  Best Local Similarity   60.2%;  Pred. No. 5e-35;
  Matches  358;  Conservative    0;  Mismatches  236;  Indels    1;  Gaps    1;

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    |||||||| | ||||| ||| |||| ||||||||||
Db          1 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 60

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||     |||  ||||  |||||| || |
Db         61 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 120

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || ||||| ||    | ||||| || ||  ||
Db        121 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 180

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
                || |           |  || ||  ||||||| ||  ||  ||||  | | || || |
Db        181 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 240

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
              |||| ||| | |||||||  | ||| || || ||  |           || |||  |||||
Db        241 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 300

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAG 912
              |    | |||||||||  |    ||||| || ||    ||| |  |  | | ||||||
Db        301 TTAAGGATGTGGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCT 360

Qy        913 CAATCACTTATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACC 972
              |||||  || ||   | |||| |.| |||||||  |  | ||||||  | |||||  ||
Db        361 GCATCACCTACGGCCTCAGGGGCATCTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACA 420

Qy        973 AGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTG 1032
              | ||  | || || ||    |  || |||    | |||||  | ||| |||||||  ||
Db        421 AAGACCTCCATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTT 480

Qy       1033 CTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATG 1092
              ||  | ||     |||| |||  |   ||  | |||||| |||| || ||  | || |
Db        481 TGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGG 540

Qy       1093 AAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGA 1147
              ||||  |   | ||||||||     ||    ||| | | |||| |  | ||
Db        541 CCGTGG-CCGCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGA 594

RESULT 72
AAD33884
ID   AAD33884 standard; DNA; 701 BP.
XX
AC   AAD33884;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human carboxypeptidase-like enzyme DNA #1.
XX
KW   Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW   chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW   antiallergic; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220805-A2.
XX
PD   14-MAR-2002.
XX
PF   05-SEP-2001; 2001WO-EP010203.
XX
PR   11-SEP-2000; 2000US-0231546P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 1; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 701 BP; 167 A; 189 C; 206 G; 139 T; 0 U; 0 Other;

  Query Match             9.1%;  Score 204.8;  DB 6;  Length 701;
  Best Local Similarity   58.6%;  Pred. No. 7.1e-35;
  Matches  356;  Conservative    0;  Mismatches  252;  Indels    0;  Gaps    0;

Qy       1105 TTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGA 1164
              | || ||||||||    ||    ||| | | |||| |  | ||| |||| || |     |
Db         54 TCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTTGCCA 113

Qy       1165 ATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCT 1224
              |        |||   |||   | |||  |       ||| | || || || |||||||  |
Db        114 AGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCACCGAT 173

Qy       1225 GGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTA 1284
              || ||||||| ||||| ||  | ||||| ||||| ||||| ||   || | ||||  | |
Db        174 GGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGGGGCCA 233

Qy       1285 AAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGA 1344
              | || || || ||  |    ||  | || || || || ||| | || || ||  ||||||
Db        234 AGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAACATGA 293

Qy       1345 ATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAA 1404
              |      |  || |  | ||||| ||| |  | ||     |   |||  |  ||  |
Db        294 CTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTAC 353

Qy       1405 ATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATA 1464
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Db        354 GCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACT 413

Qy       1465 TTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAAC 1524

Db        414 TCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGC 473

Qy       1525 CAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCC 1584

Db        474 CAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACTTTGACCTTTCAGGAGGCCACGG 533

Qy       1585 ACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATG 1644

Db        534 GCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAGAATG 593

Qy       1645 AGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAG 1704

Db        594 AAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCCGGCCGCGTACCTGTATG 653

Qy       1705 AGATGGCC 1712

Db        654 AGGTCTCC 661
```

RESULT 73
AAD33888
ID AAD33888 standard; DNA; 567 BP.
XX
AC AAD33888;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #5.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 5; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 567 BP; 130 A; 140 C; 179 G; 117 T; 0 U; 1 Other;

Query Match 8.8%; Score 196.6; DB 6; Length 567;
Best Local Similarity 60.2%; Pred. No. 4.2e-33;
Matches 342; Conservative 0; Mismatches 225; Indels 1; Gaps 1;

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Qy        581 GTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGA 640

Db          1 GTGCATTTACGGGCACCTGGATGTGCAGCCTGCAGCCCTGGAGGACGGCTGGGACAGCGA 60

Qy        641 CCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAA 700

Db         61 GCCCTTCACCCTGGTGGAGCGAGACGGCAAGCTGCATGGGAGAGGTTCGACTGATGATAA 120

Qy        701 AGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCT 760

Db        121 GGGCCCGGTGGCCGGCTGGATAAACGCCCTGGAAGCGTATCAGAAAACAGGCCAGGAGAT 180

Qy        761 TCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGA 820

Db        181 TCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGGGCCTAGA 240

Qy        821 GGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTC 880

Db        241 CGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTACGTCTGCATTTC 300

Qy        881 AGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAG 940

Db        301 TGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGG-CCTCAGGGGCATTG 359

Qy        941 CTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGG 1000

Db        360 CTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCATTCTGGGGTGTACGGNGG 419

Qy       1001 CATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTC 1060

Db        420 CTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGGCTCTTTGGTGGACAAGAA 479

Qy       1061 TGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAAT 1120

Db        480 GGGGAACATCCTGATCCCCGGCATTAACGAGGCCGTGGCCGCCGTCACGGAAGAGGAGCA 539

Qy       1121 AAATACATACAAAGCCATCCATCTAGAC 1148

Db        540 CAAGCTGTACGACGACATCGACTTTGAC 567
```

RESULT 74
AAD33894
ID AAD33894 standard; DNA; 699 BP.
XX
AC AAD33894;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #11.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;

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XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 11; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 699 BP; 165 A; 186 C; 208 G; 140 T; 0 U; 0 Other;

  Query Match             8.6%;  Score 191.8;  DB 6;  Length 699;
  Best Local Similarity   56.9%;  Pred. No. 5.1e-32;
  Matches  392;  Conservative    0;  Mismatches  292;  Indels    5;  Gaps    2;

Qy       1021 CTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTG 1080
             ||||||| |    ||  | ||     |||| |||  |   ||  | |||||| |||| |
Db          2 CTGATCTCATGTTGCTGATGGGCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCG 61

Qy       1081 GAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCC 1140
             | ||  | || |  ||||   |  | || ||||||||     ||    ||| | | ||||
Db         62 GCATTAACGAGGCCGTGGGCGCCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCG 121

Qy       1141 ATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTA 1200
             | | ||| |||| || |      ||         |||   |||   | |||  |    |
Db        122 ACTTTGACATAGAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACA 181

Qy       1201 AGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGG 1260
             || | || || || |||||||  ||| |||||| ||||| ||  | ||||| ||||| |
Db        182 AGAAAGACATCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAG 241

Qy       1261 GCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTT 1320
             |||| ||   || | ||||  | || || || || ||  |     ||  | || || || |
Db        242 GCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCT 301

Qy       1321 CAATCCGTCTAGTCCCTCACATGAATGT----GTCTGCGGTGGAAAAACAGGTGACACGA 1376
             | ||| | || || ||  | |      |      |    ||  |    ||| ||| |
Db        302 CCATCAGGCTCGTGCCCGAAACATGACTCCTGAAGTCGTCGGGCGAGCAGGGTCACAAGC 361

Qy       1377 CATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACT 1436
             | ||     |   |||  |  ||  |   ||  |||| ||      || | ||||
Db        362 TACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGTCCAAGGTGTACATGGGC 421

Qy       1437 CTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGA 1496
             |  ||      | || ||| |  |  |   | || | || || || || |  | ||||
Db        422 CACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGA 481

Qy       1497 GCGAT-CAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCC 1555
             || ||  |||||||| |||||    || |||||  ||||| |||| ||   ||  |||||
Db        482 GCCATGAAGAACAGTTTTTGGTGTTGAGCCAGACTTGATCAGGGAAGGCGGCAGTATTCC 541

Qy       1556 AATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGC 1615
                |  ||    |  || ||||||  |      ||||| |||  ||||  | ||  ||||  |
Db        542 CGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTC 601

Qy       1616 TGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGG 1675
              |  ||||| ||||  || || |||||||| ||  |||||||||  ||||||||||||| |
Db        602 AGCGGATGACGGAGCGCACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGCG 661

Qy       1676 AACCAAATTATTTGCTGCCTTTTTCTTAG 1704
               ||  |  |  | || |     || ||||
Db        662 GACACAGATGCTGGCCGGTACCTTATTAG 690


RESULT 75
AAD33891
ID   AAD33891 standard; DNA; 514 BP.
XX
AC   AAD33891;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human carboxypeptidase-like enzyme DNA #8.
XX
KW   Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW   chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW   antiallergic; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220805-A2.
XX
PD   14-MAR-2002.
XX
PF   05-SEP-2001; 2001WO-EP010203.
XX
PR   11-SEP-2000; 2000US-0231546P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 8; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 514 BP; 119 A; 139 C; 150 G; 106 T; 0 U; 0 Other;

  Query Match             8.4%;  Score 188.2;  DB 6;  Length 514;
  Best Local Similarity   60.8%;  Pred. No. 2.8e-31;
  Matches  307;  Conservative    0;  Mismatches  198;  Indels    0;  Gaps    0;

Qy       1213 TAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATG 1272
             | |||||||  ||| ||||||| ||||| ||  | ||||| ||||| ||||| ||   ||
Db          1 TCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTG 60

Qy       1273 AGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAG 1332
               | ||||  | || || || || ||  |     ||  | || || || || ||| | || |
Db         61 GGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCG 120

Qy       1333 TCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGT 1392
             | ||  |||||| |      |  || |   | ||||| ||| |  | ||     |   ||
Db        121 TGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGT 180

Qy       1393 TCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGT 1452
             |  |  ||  |   ||  ||||  || |    || | ||||   |  ||     | || |
Db        181 TTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCT 240
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Qy       1453 GGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGT 1512
Db        241 GGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTT 300

Qy       1513 TTGGAACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCC 1572
Db        301 TTGGTGTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTC 360

Qy       1573 AGGAGATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAAC 1632
Db        361 AGGAGGCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCC 420

Qy       1633 ATTCGCAGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTG 1692
Db        421 ACTCCCAGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCG 480

Qy       1693 CCTTTTTCTTAGAGATGGCCCAGCT 1717
Db        481 CGTACCTGTATGAGGTCTCCCAGCT 505
```

RESULT 76
AAD33885
ID AAD33885 standard; DNA; 606 BP.
XX
AC AAD33885;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #2.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 2; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 606 BP; 136 A; 160 C; 181 G; 129 T; 0 U; 0 Other;

Query Match 8.1%; Score 181.6; DB 6; Length 606;
Best Local Similarity 56.8%; Pred. No. 8.4e-30;
Matches 334; Conservative 0; Mismatches 254; Indels 0; Gaps 0;

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Qy        928 CCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAG 987
Db          8 CTCAGGGCATATGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCATTCTG 67

Qy        988 GAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCC 1047
Db         68 GGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGGCTCTT 127

Qy       1048 TGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTA 1107
Db        128 TGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCGTGGCCGCCGTCA 187

Qy       1108 CAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATA 1167
Db        188 CGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTTGCCAAGG 247

Qy       1168 GCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACCTCTGGA 1227
Db        248 ATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCACCGATGGC 307

Qy       1228 GGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAA 1287
Db        308 GGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGGGGCCAAGA 367

Qy       1288 CAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATG 1347
Db        368 CCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAACATGACTC 427

Qy       1348 TGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATA 1407
Db        428 CTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTACGCA 487

Qy       1408 GTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTG 1467
Db        488 GCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCA 547

Qy       1468 ATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTG 1515
Db        548 GTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTGG 595
```

RESULT 77
AAD33886
ID AAD33886 standard; DNA; 623 BP.
XX
AC AAD33886;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #3.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX

PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 3; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 623 BP; 156 A; 143 C; 196 G; 128 T; 0 U; 0 Other;

Query Match 8.1%; Score 180.8; DB 6; Length 623;
Best Local Similarity 58.8%; Pred. No. 1.3e-29;
Matches 333; Conservative 0; Mismatches 227; Indels 6; Gaps 1;

Qy 313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db 26 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 85

Qy 373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db 86 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 139

Qy 433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db 140 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 199

Qy 493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db 200 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 259

Qy 553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db 260 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 319

Qy 613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db 320 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 379

Qy 673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db 380 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 439

Qy 733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
Db 440 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 499

Qy 793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
Db 500 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCT 559

Qy 853 TCTCTGGTGTGGACTACATTGTAATT 878
Db 560 TTAAGGATGTGGACTATGTCTGCATT 585

RESULT 78
AAD33889
ID AAD33889 standard; DNA; 640 BP.
XX
AC AAD33889;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #6.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 6; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 640 BP; 153 A; 147 C; 204 G; 136 T; 0 U; 0 Other;

Query Match 8.0%; Score 178.4; DB 6; Length 640;
Best Local Similarity 59.4%; Pred. No. 4.3e-29;
Matches 341; Conservative 0; Mismatches 226; Indels 7; Gaps 2;

Qy 313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db 56 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 115

Qy 373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db 116 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 169

Qy 433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db 170 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 229

Qy 493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db 230 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 289

Qy 553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db 290 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 349

Qy 613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db 350 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 409

Qy 673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
Db 410 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 469

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Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
              || |             |  || ||  ||||||| ||  ||  ||||  | | || || |
Db        470 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 529

Qy        793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCT 852
              |||| ||| | |||||||  | ||| || || ||  |       | ||| |||  |||||
Db        530 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTGCCCGGAAA-GACACATTCT 588

Qy        853 TCTCTGGTGTGGACTACATTGTAATTTCAGATAA 886
              |    | |||||||||  |    ||||| || ||
Db        589 TTAAGGATGTGGACTATGTCTGCATTTCTGACAA 622
```

RESULT 79
AAH07750
ID AAH07750 standard; cDNA; 704 BP.
XX
AC AAH07750;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA clone (5'-primer) SEQ ID NO:4585.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 1; SEQ ID NO 4585; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 704 BP; 166 A; 182 C; 197 G; 150 T; 0 U; 9 Other;

```
  Query Match             7.8%;  Score 174.4;  DB 4;  Length 704;
  Best Local Similarity   55.5%;  Pred. No. 3.3e-28;
  Matches  352;  Conservative    0;  Mismatches  280;  Indels    2;  Gaps    1;

Qy        863 GGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTA 922
              ||||||  |    |||||  || ||    ||| |  |  | | ||||||    |||||  ||
Db          1 GGACTATGTCTGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTA 60

Qy        923 TGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCA 982
              ||   | |||| |   |||||||  |  | ||||||  | |||||  || | ||  | ||
Db         61 CGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCA 120

Qy        983 CTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGG 1042
              || ||    |  || |||    | |||||  | ||| |||||||  ||   ||  | ||
Db        121 TTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGG 180

Qy       1043 TAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCC 1102
                |||| |||  |   ||  | |||||| |||| || ||  | || |   |||   |
Db        181 CTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCATGGCCGC 240

Qy       1103 TCTTACAGAA--GAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 1160
                | || |||   ||||    ||    ||| | | |||| |  | ||| |||| || |
Db        241 CGTCACGGAAATCAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTT 300

Qy       1161 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1220
                ||         |||  |||   | |||  |       ||| | || || || ||||||
Db        301 GCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCAC 360

Qy       1221 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1280
              |  ||| ||||||| ||||| ||  | ||||| ||||| ||||| ||  ||  | ||||
Db        361 CGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGGG 420

Qy       1281 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1340
                | || || || || ||        ||  | || || || || ||| | || || ||  ||
Db        421 GCCAAGACCGTGATTCCCANGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCGAAC 480

Qy       1341 ATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAA 1400
              |||| |       | || |  | || || ||| |  | ||      |   |||  |  ||
Db        481 ATGACTCCTGAAGTCGTCGGCGAGCANGTCACAAGCTACCTAACTAAGAAGTTTGCTGAA 540

Qy       1401 AGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCA 1460
                |   ||  |||| || |   || | ||||   |  ||     |  || ||| |  |
Db        541 CTACGCAGCCCCAATGAGTTCAANGTGTACATGGGCCACGGTGGGAANCCCTGGGTCTCC 600

Qy       1461 AATATTGATGACACCCAGTATCTCGCAGCAAAAA 1494
                |  |   | |  | || || || || |   |||
Db        601 GACTTCAGTCAACCTCATTACCTGGCTGGGGAAA 634
```

RESULT 80
AAD33890
ID AAD33890 standard; DNA; 613 BP.
XX
AC AAD33890;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #7.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX

PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 7; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 613 BP; 153 A; 138 C; 193 G; 129 T; 0 U; 0 Other;

Query Match 7.7%; Score 172.6; DB 6; Length 613;
Best Local Similarity 59.4%; Pred. No. 7.9e-28;
Matches 331; Conservative 0; Mismatches 219; Indels 7; Gaps 2;

```
Qy      313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
            | ||  ||||||| ||     ||||||||   |   |  |||  ||     | |||||||
Db       23 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 82

Qy      373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
            | ||| |||| |  ||||    ||| | |         |||   ||  ||   || ||||
Db       83 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 136

Qy      433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
            |||  || ||||| |    |  |||   |||||| |  |||||    |||||| || |
Db      137 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 196

Qy      493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
            |    ||  |||| || |||||    |    | ||  | |||||  |  | || | |   |
Db      197 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 256

Qy      553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
            ||||   ||| ||   |||     ||||||||| | ||||| ||| |||| ||||||||||
Db      257 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 316

Qy      613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
            | | || ||  || || |||  ||  || ||||     |||  ||||  |||||| || |
Db      317 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 376

Qy      673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
            | |||||  ||||  |||| ||   | || ||||| ||     |  ||||| || ||  ||
Db      377 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 436

Qy      733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
              || |           |  || ||  ||||||| ||  ||  ||||  | | || || |
Db      437 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 496

Qy      793 TGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACT-TGTGGAAAAAGAAAAGGACCGATTC 851
            |||| ||| | |||||||  | ||| || || ||   |       | ||| |||  ||||
Db      497 TGGAGGAGTCAGGCTCTGAGGGCCTAGACGAGCTGATTTTTGCCCGGAAATGACACATTC 556

Qy      852 TTCTCTGGTGTGGACTA 868
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            ||    | |||||||||
Db      557 TTTAAGGATGTGGACTA 573
```

RESULT 81
AAH06896
ID AAH06896 standard; cDNA; 754 BP.
XX
AC AAH06896;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human cDNA clone (5'-primer) SEQ ID NO:3731.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 1; SEQ ID NO 3731; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 754 BP; 171 A; 186 C; 235 G; 159 T; 0 U; 3 Other;

Query Match 7.0%; Score 157.4; DB 4; Length 754;
Best Local Similarity 58.7%; Pred. No. 1.8e-24;
Matches 294; Conservative 0; Mismatches 201; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||     | |||||||
Db        182 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 241

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        242 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 295

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       |  |||   |||||| |  |||||    |||||| || |
Db        296 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 355

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        356 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 415

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    |||||||| | ||||| ||| |||| ||||||||||
Db        416 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 475

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||     |||  ||||  |||||| || |
Db        476 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 535

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | ||||  |||| |||| || | || ||||| ||    |  ||||| || ||  ||
Db        536 TGTATGGGGGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 595

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGA 792
              || |      |  || ||  ||||||| ||  ||  ||||  | | || || |
Db        596 AAGCGTATCAGAAAACAGGCCAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCA 655

Qy        793 TGGAAGAGGCTGGCTCTGTTG 813
              ||||||  |      || |||
Db        656 TGGAAGGAGTCAAGGCTCTTG 676
```

RESULT 82
ACH74305
ID ACH74305 standard; DNA; 582 BP.
XX
AC ACH74305;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human genome derived single exon probe #7500.
XX
KW Human; probe; ss; gene expression; single exon probe; microarray;
KW alternative splicing event; genomic alteration.
XX
OS Homo sapiens.
XX
PN US2003194704-A1.
XX
PD 16-OCT-2003.
XX
PF 03-APR-2002; 2002US-00029386.
XX
PR 03-APR-2002; 2002US-00029386.
XX
PA (PENN/) PENN S G.
PA (RANK/) RANK D R.
PA (HANZ/) HANZEL D K.
XX
PI Penn SG, Rank DR, Hanzel DK;
XX
DR WPI; 2004-119264/12.
XX
PT New human genome-derived single exon nucleic acid probes useful for human
PT gene expression analysis, for identifying or characterizing alternative
PT splicing events, for assessing genomic alterations or as tools for
PT surveying tissues.
XX
PS Claim 15; SEQ ID NO 7500; 80pp; English.
XX
CC The invention relates to a nucleic acid probe for measuring human gene
CC expression, comprising any of the 27,400 fully defined nucleotide
CC sequences in the specification, or their complements or fragments, and
CC encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC fully defined in the specification. The probe is a single exon probe that
CC hybridises under high stringency conditions to a nucleic acid molecule
CC expressed in human cells or tissues. Also included are a spatially-
CC addressable set of single exon nucleic acid probes for measuring human
CC gene expression (comprising a plurality of single exon nucleic acid
CC probes cited above, where each of the plurality of probes is separately
CC and addressably isolatable or amplifiable from the plurality), a single
CC exon microarray for measuring human gene expression, a method of
CC measuring human gene expression, a vector comprising the single exon
CC probe cited above, an ORF-encoded peptide comprising at least 8
CC contiguous amino acids of any of the above- mentioned amino acid
CC sequences (optionally with conservative amino acid substitutions), an
CC isolated antibody that binds specifically to a peptide cited above,
CC methods of selling and/or licensing single exon probes or microarrays to
CC a customer desiring to measure gene expression, a method of providing
CC human gene expression data by subscription, and a computer-readable
CC storage medium which contains a database having a plurality of records
CC (each record including data on the expression of a single exon probe
CC cited above. The probe, methods and apparatus are useful in gene
CC expression analysis. The probes may be used as tools for surveying
CC tissues to detect the presence of expressed messages that contain their
CC specific exon, or in constructing genome-derived single exon microarrays.
CC In addition, the probes are used in identifying and characterising
CC alternative splicing events, in detecting and characterising gross
CC alterations in the genomic locus that includes their exon, in assessing
CC smaller genomic alterations, in priming the synthesis of nucleic acids,
CC or in expressing the ORF-encoded peptide. The present sequence is a human
CC single exon probe of the invention. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ Sequence 582 BP; 115 A; 174 C; 155 G; 138 T; 0 U; 0 Other;

  Query Match   6.9%; Score 154.4; DB 12; Length 582;
  Best Local Similarity   99.4%; Pred. No. 7.7e-24;
  Matches 155; Conservative   0; Mismatches   1; Indels   0; Gaps   0;

```
Qy        352 AGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCA 411
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        197 AGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCA 256

Qy        412 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 471
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        257 GACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCC 316

Qy        472 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGC 507
              |||||||||||||||||||||||||||||| |||
Db        317 GTGTGGCCTCGGTGGACATGGGTCCTCAGCAGGTGC 352
```

RESULT 83
ACH88005
ID ACH88005 standard; DNA; 156 BP.
XX
AC ACH88005;
XX
DT 29-JUL-2004 (first entry)
XX
DE Human genome derived single exon probe #21200.
XX
KW Human; probe; ss; gene expression; single exon probe; microarray;
KW alternative splicing event; genomic alteration.
XX
OS Homo sapiens.
XX
PN US2003194704-A1.

```
XX
PD   16-OCT-2003.
XX
PF   03-APR-2002; 2002US-00029386.
XX
PR   03-APR-2002; 2002US-00029386.
XX
PA   (PENN/) PENN S G.
PA   (RANK/) RANK D R.
PA   (HANZ/) HANZEL D K.
XX
PI   Penn SG,  Rank DR,  Hanzel DK;
XX
DR   WPI; 2004-119264/12.
XX
PT   New human genome-derived single exon nucleic acid probes useful for human
PT   gene expression analysis, for identifying or characterizing alternative
PT   splicing events, for assessing genomic alterations or as tools for
PT   surveying tissues.
XX
PS   Claim 1; SEQ ID NO 21200; 80pp; English.
XX
CC   The invention relates to a nucleic acid probe for measuring human gene
CC   expression, comprising any of the 27,400 fully defined nucleotide
CC   sequences in the specification, or their complements or fragments, and
CC   encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC   fully defined in the specification. The probe is a single exon probe that
CC   hybridises under high stringency conditions to a nucleic acid molecule
CC   expressed in human cells or tissues. Also included are a spatially-
CC   addressable set of single exon nucleic acid probes for measuring human
CC   gene expression (comprising a plurality of single exon nucleic acid
CC   probes cited above, where each of the plurality of probes is separately
CC   and addressably isolatable or amplifiable from the plurality), a single
CC   exon microarray for measuring human gene expression, a method of
CC   measuring human gene expression, a vector comprising the single exon
CC   probe cited above, an ORF-encoded peptide comprising at least 8
CC   contiguous amino acids of any of the above- mentioned amino acid
CC   sequences (optionally with conservative amino acid substitutions), an
CC   isolated antibody that binds specifically to a peptide cited above,
CC   methods of selling and/or licensing single exon probes or microarrays to
CC   a customer desiring to measure gene expression, a method of providing
CC   human gene expression data by subscription, and a computer-readable
CC   storage medium which contains a database having a plurality of records
CC   (each record including data on the expression of a single exon probe
CC   cited above. The probe, methods and apparatus are useful in gene
CC   expression analysis. The probes may be used as tools for surveying
CC   tissues to detect the presence of expressed messages that contain their
CC   specific exon, or in constructing genome-derived single exon microarrays.
CC   In addition, the probes are used in identifying and characterising
CC   alternative splicing events, in detecting and characterising gross
CC   alterations in the genomic locus that includes their exon, in assessing
CC   smaller genomic alterations, in priming the synthesis of nucleic acids,
CC   or in expressing the ORF-encoded peptide. The present sequence is a human
CC   single exon probe of the invention. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ   Sequence 156 BP; 25 A; 44 C; 57 G; 30 T; 0 U; 0 Other;

  Query Match             6.8%;  Score 152.4;  DB 12;  Length 156;
  Best Local Similarity   99.4%;  Pred. No. 1.4e-23;
  Matches  153;  Conservative    0;  Mismatches    1;  Indels    0;  Gaps    0;

Qy        354 ACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGA 413
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db          1 ACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGA 60

Qy        414 CAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGT 473
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 CAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGT 120

Qy        474 GTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGC 507
              |||||||||||||||||||||||||||||||| |||
Db        121 GTGGCCTCGGTGGACATGGGTCCTCAGCAGGTGC 154


RESULT 84
AAS65840
ID   AAS65840 standard; cDNA; 497 BP.
XX
AC   AAS65840;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #1644.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG01653.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 1644; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 497 BP; 90 A; 144 C; 148 G; 115 T; 0 U; 0 Other;

  Query Match             6.8%;  Score 152.2;  DB 5;  Length 497;
  Best Local Similarity   71.5%;  Pred. No. 2.2e-23;
  Matches  291;  Conservative    0;  Mismatches   43;  Indels   73;  Gaps    4;

Qy        224 GGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACC 283
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        162 GGCTGCGTCCCTGCTGGCTGTGCTGCTGCTGCTGCTGGAGCGCGGCATGTTCTCCTCACC 221
```

```
Qy        284 CTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGA 343
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        222 CTCCCCGCCCCCGGCGCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGA 281

Qy        344 ATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCC 403
              |||||||||||| |  ||                              ||||  | || ||
Db        282 ATTTGTGCAGACTCCCAA---------------------------TGTCATGTCTTTGAA 314

Qy        404 TCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGTGGCTGCGGA-CACGCTGCAGCGCC 462
              |    |   | || | | |  ||   |        ||| | | || ||  |||||||  |
Db        315 TTTTCTGGAAGAACAACACAGCATTTTTGAAAATGTGATTCCTGATCATTCTGCAGCTGC 374

Qy        463 TGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTC 522
                                                          || ||||||||||||
Db        375 ---------------------------------------------CCGGATGGTCAGAGTC 390

Qy        523 TTCC-AATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTG 581
              |||| |||||||||| |||||||||||||| ||||||||||||||||||||||||||||
Db        391 TTCCAAATACCTCCCATCATCCTGGCCGAATTGGGGAGCGATCCCACGAAAGGCACCGTG 450

Qy        582 TGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGG 628
              ||||||||||||||||||||||||||||||||||||||||||||||
Db        451 TGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGG 497
```

RESULT 85
AAD33892
ID AAD33892 standard; DNA; 558 BP.
XX
AC AAD33892;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #9.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 9; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 558 BP; 133 A; 135 C; 172 G; 114 T; 0 U; 4 Other;

Query Match 6.7%; Score 150.2; DB 6; Length 558;
Best Local Similarity 58.5%; Pred. No. 6.3e-23;
Matches 279; Conservative 0; Mismatches 192; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  |||||||  ||     |||||||| |   |  |||  ||     | |||||||
Db         86 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 145

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        146 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 199

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |      |  |||   |||||| |  |||||    |||||| || |
Db        200 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 259

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        260 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 319

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    ||||||||| | ||||| ||| |||| ||||||||||
Db        320 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 379

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || ||| ||  || |||      ||| ||||  ||||| || | |
Db        380 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 439

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || ||||| ||       |||||  || ||  ||
Db        440 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCNGTGGCNCGCTGGATAAACGCCCTGN 499

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGG 789
                || |          |  || ||  ||||||| ||  ||  ||||  | | || |
Db        500 AAGCGTATCAGAAAACAGGCCANGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAG 556
```

RESULT 86
AAD33893
ID AAD33893 standard; DNA; 665 BP.
XX
AC AAD33893;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #10.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.

XX
PS Disclosure; Fig 10; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 665 BP; 149 A; 167 C; 216 G; 133 T; 0 U; 0 Other;

Query Match 6.4%; Score 143; DB 6; Length 665;
Best Local Similarity 58.6%; Pred. No. 2.5e-21;
Matches 270; Conservative 0; Mismatches 185; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||     | |||||||
Db        186 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 245

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        246 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 299

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |     |  |||   |||||| |  |||||    |||||| || |
Db        300 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 359

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        360 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 419

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    |||||||| | ||||| ||| |||| ||||||||||
Db        420 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 479

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||      |||  ||||  |||||| || |
Db        480 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 539

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || ||||| ||     |  ||||| || ||  ||
Db        540 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 599

Qy        733 GCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAATATC 773
                || |          |  || ||  | ||||| ||  ||
Db        600 AAGCGTATCAGAAAACAGGCCAGGAGATCCCTGTCAACGTC 640
```

RESULT 87
AAD33895
ID AAD33895 standard; DNA; 495 BP.
XX
AC AAD33895;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #12.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 12; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 495 BP; 120 A; 115 C; 162 G; 98 T; 0 U; 0 Other;

Query Match 6.2%; Score 140; DB 6; Length 495;
Best Local Similarity 59.9%; Pred. No. 1.1e-20;
Matches 255; Conservative 0; Mismatches 165; Indels 6; Gaps 1;

```
Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||     | |||||||
Db         63 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 122

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        123 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 176

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || |||||  |     |  |||   |||||| |  |||||    |||||| || |
Db        177 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 236

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |.   | ||  | |||||  |  | || | |   |
Db        237 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 296

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    |||||||| | ||||| ||| |||| ||||||||||
Db        297 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 356

Qy        613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
              | | || ||  || || |||  ||  || ||||      |||  ||||  |||||| || |
Db        357 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 416

Qy        673 TTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGA 732
              | |||||  ||||  |||| ||  | || ||||| ||     |  ||||| || ||  ||
Db        417 TGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGCTGGATAAACGCCCTGG 476

Qy        733 GCGCCT 738
                || |
Db        477 AAGCGT 482
```

RESULT 88
AAZ33635
ID AAZ33635 standard; cDNA; 886 BP.
XX
AC AAZ33635;

XX
DT 08-DEC-1999 (first entry)
XX
DE Human breast tumour-associated EST 25.
XX
KW Expressed sequence tag; EST; human; breast; cancer; gene therapy;
KW treatment; tumour; cytostatic; medicament; ss.
XX
OS Homo sapiens.
XX
PN DE19813839-A1.
XX
PD 23-SEP-1999.
XX
PF 20-MAR-1998; 98DE-01013839.
XX
PR 20-MAR-1998; 98DE-01013839.
XX
PA (META-) METAGEN GES GENOMFORSCHUNG MBH.
XX
PI Specht T, Hinzmann B, Schmitt A, Pilarsky C, Dahl E, Rosentahl A;
XX
DR WPI; 1999-528981/45.
DR P-PSDB; AAY48560.
XX
PT Human nucleic acid sequences and protein products from tumor breast
PT tissue, useful for breast cancer therapy.
XX
PS Claim 1a; 104; 188pp; German.
XX
CC This invention decribes novel human nucleic acid sequences from tumor
CC breast tissue which have cytostatic activity. The nucleic acid sequences
CC can be used to produce and isolate full-length gene sequences. They can
CC be used to express proteins, which can be used as tools to find an
CC activity against breast cancer. The sequences can be used in sense or
CC antisense form. They are especially useful for medicaments for gene
CC therapy to treat breast cancer. AAZ33611-Z48617 represents expressed
CC sequence tags described in the method of the invention
XX
SQ Sequence 886 BP; 227 A; 234 C; 234 G; 191 T; 0 U; 0 Other;

Query Match 5.8%; Score 129.6; DB 2; Length 886;
Best Local Similarity 58.6%; Pred. No. 2.4e-18;
Matches 225; Conservative 0; Mismatches 159; Indels 0; Gaps 0;

Qy 1356 GTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAAC 1415
Db 169 GTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAAT 228

Qy 1416 AAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACC 1475
Db 229 GAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCT 288

Qy 1476 CAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATC 1535
Db 289 CATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACC 348

Qy 1536 CGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCCTG 1595
Db 349 AGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTC 408

Qy 1596 GTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAAC 1655
Db 409 ATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAGAATGAAAAGCTCAAC 468

Qy 1656 AGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAG 1715
Db 469 AGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCTGTATGAGGTCTCCCAG 528

Qy 1716 CTCCATTAATCACAAGAACCTTCT 1739
Db 529 CTGAAGGACTAGGCCAAGCCCTCT 552

RESULT 89
AAD33900
ID AAD33900 standard; DNA; 518 BP.
XX
AC AAD33900;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #17.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 17; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 518 BP; 116 A; 136 C; 139 G; 124 T; 0 U; 3 Other;

Query Match 5.7%; Score 128.4; DB 6; Length 518;
Best Local Similarity 59.7%; Pred. No. 3.7e-18;
Matches 216; Conservative 0; Mismatches 146; Indels 0; Gaps 0;

Qy 1356 GTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCAAAAGAAATAGTTCCAAC 1415
Db 3 GTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTGAACTACGCAGCCCCAAT 62

Qy 1416 AAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACC 1475
Db 63 GAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCT 122

Qy 1476 CAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATC 1535
Db 123 CATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACC 182

Qy 1536 CGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTG 1595
Db 183 AGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTC 242

Qy 1596 GTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAAC 1655

```
Db        243 ATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAGAATGAAAAGCTCAAC 302

Qy       1656 AGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAGATGGCCCAG 1715

Db        303 AGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCTGTATGAGGTCTCCCAG 362

Qy       1716 CT 1717

Db        363 CT 364


RESULT 90
AAD33896/c
ID   AAD33896 standard; DNA; 464 BP.
XX
AC   AAD33896;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human carboxypeptidase-like enzyme DNA #13.
XX
KW   Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW   chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW   antiallergic; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220805-A2.
XX
PD   14-MAR-2002.
XX
PF   05-SEP-2001; 2001WO-EP010203.
XX
PR   11-SEP-2000; 2000US-0231546P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 13; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 464 BP; 93 A; 133 C; 114 G; 124 T; 0 U; 0 Other;

  Query Match             5.7%;  Score 128.2;  DB 6;  Length 464;
  Best Local Similarity   57.5%;  Pred. No. 4e-18;
  Matches  249;  Conservative    0;  Mismatches  183;  Indels    1;  Gaps    1;

Qy        699 AAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGAT 758

Db        464 AAGGGCCCGGTGCCCGGCTGGATAAACGCCCCGGAAGCGTATCAGAAAACAGGCCAGGAG 405

Qy        759 CTTCCTGTGAATAT-CAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCT 817

Db        404 ATTCCTGTCAACGTCCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGGGCCT 345
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Qy        818 GGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAAT 877

Db        344 AGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTACGTCTGCAT 285

Qy        878 TTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAA 937

Db        284 TTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGGGGCAT 225

Qy        938 CAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGG 997

Db        224 TTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCCATTCTGGGGTGTACGG 165

Qy        998 TGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTC 1057

Db        164 GGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGGGCTCTTTGGTGGACAA 105

Qy       1058 GTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAGGA 1117

Db        104 GAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCGTGGCCGCCGTCACGGAAGAGGA 45

Qy       1118 AATAAATACATAC 1130

Db         44 GCCCAAGCTGTAC 32


RESULT 91
AAX10638/c
ID   AAX10638 standard; DNA; 127 BP.
XX
AC   AAX10638;
XX
DT   30-MAR-1999  (first entry)
XX
DE   Human biallelic polymorphic DNA fragment WI-15225.
XX
KW   Polymorphism; biallelic; human; forensic; paternity testing; disease;
KW   detection; phenotypic typing; characteristic; infection; hereditary;
KW   autoimmune disease; cancer; inflammation; drug; therapy; medicament;
KW   treatment; marker; ss.
XX
OS   Homo sapiens.
XX
PN   WO9820165-A2.
XX
PD   14-MAY-1998.
XX
PF   05-NOV-1997;   97WO-US020313.
XX
PR   06-NOV-1996;   96US-0030455P.
XX
PA   (WHED ) WHITEHEAD INST BIOMEDICAL RES.
XX
PI   Lander ES,  Wang D,  Hudson T;
XX
DR   WPI; 1998-286974/25.
XX
PT   New isolated nucleic acid segments from the human genome - used for
PT   determining polymorphic forms for use in e.g. forensics, paternity
PT   testing or phenotypic typing for disease.
XX
PS   Claim 1; Page 67; 310pp; English.
XX
CC   AAX10269-X12937 are human DNA fragments which contain biallelic
CC   polymorphic markers which have been isolated using the primers
CC   represented in AAX09121-X10268. The base occupying the polymorphic site
CC   is indicated by the appropriate IUPAC-IUB ambiguity code. These fragments
CC   can be used in methods for determining polymorphic forms in an individual
CC   for use in e.g. forensics, paternity testing or for phenotypic typing for
CC   diseases such as agammaglobulinemia, diabetes insipidus, Lesch-Nyhan
CC   syndrome, muscular dystrophy, Wiskott-Aldrich syndrome, Fabry's disease,
CC   familial hypercholesterolemia, polycystic kidney disease, hereditary
CC   spherocytosis, von Willebrand's disease, tuberous sclerosis, hereditary
CC   haemorrhagic telangiectasia, familial colonic polyposis, Ehlers-Danlos
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CC   syndrome, osteogenesis imperfecta, acute intermittent porphyria,
CC   autoimmune diseases, inflammation, cancer, diseases of the nervous
CC   system, infection by pathogenic microorganisms, and characteristics such
CC   as longevity, appearance (e.g. baldness, obesity), strength, speed,
CC   endurance, fertility, and susceptibility or receptivity to particular
CC   drugs or therapeutic treatments. The isolated polymorphic nucleic acid
CC   segments can also be used to produce medicaments for the treatment or
CC   prophylaxis of such diseases
XX
SQ   Sequence 127 BP; 47 A; 16 C; 36 G; 27 T; 0 U; 1 Other;

  Query Match             5.6%;  Score 126.6;  DB 2;  Length 127;
  Best Local Similarity   99.2%;  Pred. No. 6e-18;
  Matches  126;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       2017 TTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAG 2076
             ||||||||||||||||||||||||||||||||||||||||||||||||||:||||||||||||
Db        127 TTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCRGTTTGCTTTCTAG 68

Qy       2077 GTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACT 2136
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         67 GTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACT 8

Qy       2137 CTTTCCT 2143
             |||||||
Db          7 CTTTCCT 1


RESULT 92
AAD33904/c
ID   AAD33904 standard; DNA; 536 BP.
XX
AC   AAD33904;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human carboxypeptidase-like enzyme DNA #21.
XX
KW   Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW   chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW   antiallergic; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220805-A2.
XX
PD   14-MAR-2002.
XX
PF   05-SEP-2001; 2001WO-EP010203.
XX
PR   11-SEP-2000; 2000US-0231546P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 21; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
CC   treating a carboxypeptidase-like enzyme dysfunction related diseases
CC   condition such as chronic obstructive pulmonary disease, cancer, asthma
CC   or allergy. The invention is also useful for modulating carboxypeptidase-
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 536 BP; 125 A; 156 C; 133 G; 122 T; 0 U; 0 Other;

  Query Match             5.6%;  Score 125.2;  DB 6;  Length 536;
  Best Local Similarity   61.8%;  Pred. No. 1.9e-17;
  Matches  199;  Conservative    0;  Mismatches  123;  Indels    0;  Gaps    0;

Qy        417 GAGCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTG 476
              ||  ||   || |||||||  || |||||  |      |  |||   ||||||  |  ||||
Db        536 GAAATCAGGAGGATGATGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTG 477

Qy        477 GCCTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCC 536
              |    ||||||  ||  ||    ||  ||||  ||  |||||    |    |  ||  | |||||
Db        476 GAACTGGTGGATATCGGAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCT 417

Qy        537 GTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCAC 596
              |  | || | |   |||||   |||  ||   |||    |||||||| | |||||  |||
Db        416 ATTCTGCTCGGCAGGCTGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCAC 357

Qy        597 TTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACG 656
              |||| ||||||||||| | || ||  || || |||  ||  || ||||     |||  |
Db        356 CTGGATGTGCAGCCTGCAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTG 297

Qy        657 GAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCT 716
              |||  |||||| || || ||||  ||||  |||| ||  | || |||||  ||    |
Db        296 GAGCGAGACGGCAAGCTGTATGGGAGAGGTTCGACTGATGATAAGGGCCCGGTGGCCGGC 237

Qy        717 TGGATCAATGCTGTGAGCGCCT 738
              ||||| || ||  ||   || |
Db        236 TGGATAAACGCCCTGGAAGCGT 215


RESULT 93
AAD33901
ID   AAD33901 standard; DNA; 366 BP.
XX
AC   AAD33901;
XX
DT   16-JUL-2002  (first entry)
XX
DE   Human carboxypeptidase-like enzyme DNA #18.
XX
KW   Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW   chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW   antiallergic; enzyme; ds.
XX
OS   Homo sapiens.
XX
PN   WO200220805-A2.
XX
PD   14-MAR-2002.
XX
PF   05-SEP-2001; 2001WO-EP010203.
XX
PR   11-SEP-2000; 2000US-0231546P.
XX
PA   (FARB ) BAYER AG.
XX
PI   Liou J;
XX
DR   WPI; 2002-315660/35.
XX
PT   New purified human carboxypeptidase-like enzyme, useful for identifying
PT   modulators of enzyme activity for treating cancer, asthma, allergy or
PT   chronic obstructive pulmonary disease.
XX
PS   Disclosure; Fig 18; 127pp; English.
XX
CC   The invention relates to a purified human carboxypeptidase-like enzyme.
CC   The enzyme is useful for screening for agents which decrease the activity
CC   of an carboxypeptidase-like enzyme. The invention is also useful for
```

CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 366 BP; 77 A; 98 C; 114 G; 77 T; 0 U; 0 Other;

Query Match 5.5%; Score 124.4; DB 6; Length 366;
Best Local Similarity 59.2%; Pred. No. 2.5e-17;
Matches 212; Conservative 0; Mismatches 146; Indels 0; Gaps 0;

```
Qy        922 ATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTC 981
              |||    |||| |    ||||||| |  | |||||| | |||||  || | ||  | |
Db          5 AGGGCCTCAGGGGCATTTGCTACTTTTTCATCGAGGTGGAGTGCAGCAACAAAGACCTCC 64

Qy        982 ACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCG 1041
              ||| ||     |  || |||     | |||||  | ||| |||||||  ||    ||  | |
Db         65 ATTCTGGGGTGTACGGGGGCTCGGTGCATGAGGCCATGACTGATCTCATTTTGCTGATGG 124

Qy       1042 GTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTC 1101
              |     |||| |||  |   ||  | |||||| |||| || ||  | || |  ||||
Db        125 GCTCTTTGGTGGACAAGAGGGGGAACATCCTGATCCCCGGCATTAACGAGGCCGTGGCCG 184

Qy       1102 CTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACC 1161
              |  | || |||||||||     ||    ||| | | |||| |  | ||| |||| || |
Db        185 CCGTCACGGAAGAGGAGCACAAGCTGTACGACGACATCGACTTTGACATAGAGGAGTTTG 244

Qy       1162 GGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCACC 1221
                ||         |||   |||   | |||  |       ||| | || || || |||||||
Db        245 CCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAAGAAAGACATCCTCATGCACC 304

Qy       1222 TCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGG 1279
                |||  ||||||| ||||| ||  | ||||| ||||| ||||| ||   || | ||||
Db        305 GATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGGCGCCTTCTCTGGGTCTGG 362
```

RESULT 94
AAD33905
ID AAD33905 standard; DNA; 512 BP.
XX
AC AAD33905;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #22.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.

XX
PS Disclosure; Fig 22; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 512 BP; 118 A; 136 C; 141 G; 115 T; 0 U; 2 Other;

Query Match 5.4%; Score 121.8; DB 6; Length 512;
Best Local Similarity 60.4%; Pred. No. 1e-16;
Matches 201; Conservative 0; Mismatches 132; Indels 0; Gaps 0;

```
Qy       1407 AGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATT 1466
              ||  ||||  || |     || | ||||   |  ||      | || ||| |  |  |  |
Db         11 AGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTC 70

Qy       1467 GATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCA 1526
                | || | || || || || |  | |||||| || |  ||||| |||||    || |||
Db         71 AGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCA 130

Qy       1527 GATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCAC 1586
              ||  ||| | |||| ||   ||  |||||  |  ||   |  || ||||||  |     |
Db        131 GACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGC 190

Qy       1587 AAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAG 1646
              |||| |||  |||| | ||  |||| | |  ||||| |||| || || ||||||||
Db        191 AAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCCAGAATGAA 250

Qy       1647 AAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAGAG 1706
              ||  |||||||||  |||||||||||||||||||||  |  | || || |   | |  |||
Db        251 AAGCTCAACAGGTATAACTACATAGAGGGAACCAAGATGCTGGCCGCGTACCTGTATGAG 310

Qy       1707 ATGGCCCAGCTCCATTAATCACAAGAACCTTCT 1739
              |  |||||||  |  | |       | || |||
Db        311 GTCTCCCAGCTGAAGGACTAGGCCAAGCCCTCT 343
```

RESULT 95
AAD33899
ID AAD33899 standard; DNA; 402 BP.
XX
AC AAD33899;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #16.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;

XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 16; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 402 BP; 96 A; 92 C; 132 G; 82 T; 0 U; 0 Other;

Query Match 5.4%; Score 120.2; DB 6; Length 402;
Best Local Similarity 59.8%; Pred. No. 2.2e-16;
Matches 222; Conservative 0; Mismatches 143; Indels 6; Gaps 1;

Qy 313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
Db 38 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 97

Qy 373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
Db 98 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 151

Qy 433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
Db 152 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 211

Qy 493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
Db 212 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 271

Qy 553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
Db 272 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 331

Qy 613 CTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAAC 672
Db 332 CAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGGAGCGAGACGGCAAGC 391

Qy 673 TTTATGGACGA 683
Db 392 TGTATGGGAGA 402

RESULT 96
AAD33903
ID AAD33903 standard; DNA; 345 BP.
XX
AC AAD33903;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #20.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 20; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 345 BP; 90 A; 89 C; 99 G; 67 T; 0 U; 0 Other;

Query Match 5.3%; Score 119.6; DB 6; Length 345;
Best Local Similarity 59.4%; Pred. No. 2.8e-16;
Matches 203; Conservative 0; Mismatches 139; Indels 0; Gaps 0;

Qy 1339 ACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCA 1398
Db 4 ACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTG 63

Qy 1399 AAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTG 1458
Db 64 AACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCT 123

Qy 1459 CAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAA 1518
Db 124 CCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTG 183

Qy 1519 CAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGA 1578
Db 184 TTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGG 243

Qy 1579 TCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGC 1638
Db 244 CCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCCC 303

Qy 1639 AGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCA 1680
Db 304 AGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGAACCA 345

RESULT 97
AAD33902
ID AAD33902 standard; DNA; 380 BP.
XX
AC AAD33902;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #19.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;

KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 19; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 380 BP; 95 A; 94 C; 109 G; 81 T; 0 U; 1 Other;

Query Match 5.3%; Score 119.6; DB 6; Length 380;
Best Local Similarity 58.7%; Pred. No. 2.9e-16;
Matches 206; Conservative 0; Mismatches 145; Indels 0; Gaps 0;

Qy 1339 ACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCCA 1398
Db 2 ACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCTG 61

Qy 1399 AAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTG 1458
Db 62 AACTACGNAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTCT 121

Qy 1459 CAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAA 1518
Db 122 CCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGTG 181

Qy 1519 CAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGA 1578
Db 182 TTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAGG 241

Qy 1579 TCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGC 1638
Db 242 CCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTTCC 301

Qy 1639 AGAATGAGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTG 1689
Db 302 AGAATGAAAAGCTCAACAGGTATAACTACATAGAGGGGACCAAGATGCTTG 352

RESULT 98
AAD33898
ID AAD33898 standard; DNA; 386 BP.
XX
AC AAD33898;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #15.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 15; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-
CC like enzyme activity in a disease condition. The invention is useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to diseases and abnormalities related to presence of
CC mutations in the nucleic acid sequences which encode the enzyme. The
CC present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ Sequence 386 BP; 93 A; 102 C; 116 G; 75 T; 0 U; 0 Other;

Query Match 5.3%; Score 118.2; DB 6; Length 386;
Best Local Similarity 57.0%; Pred. No. 5.9e-16;
Matches 216; Conservative 0; Mismatches 163; Indels 0; Gaps 0;

Qy 1278 GGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCT 1337
Db 8 GGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTCCATCAGGCTCGTGCCG 67

Qy 1338 CACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCTTGAAGATGTGTTCTCC 1397
Db 68 AACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCTAACTAAGAAGTTTGCT 127

Qy 1398 AAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATT 1457
Db 128 GAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGGTGGGAAGCCCTGGGTC 187

Qy 1458 GCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGA 1517
Db 188 TCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCATGAAGACAGTTTTTGGT 247

Qy 1518 ACAGAACCAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAG 1577
Db 248 GTTGAGCCAGACTTGACCAGGGAAGGCGGCAGTATTCCCGTGACCTTGACCTTTCAGGAG 307

Qy 1578 ATCGTCCACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCG 1637
Db 308 GCCACGGGCAAGAACGTCATGCTGCTGCCTGTGGGGTCAGCGGATGACGGAGCCCACTCC 367

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Qy       1638 CAGAATGAGAAAATCAACA 1656
              ||||||||  ||  ||||||
Db        368 CAGAATGAAAAGCTCAACA 386
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RESULT 99
ADQ55638
ID ADQ55638 standard; DNA; 715 BP.
XX
AC ADQ55638;
XX
DT 21-OCT-2004 (first entry)
XX
DE Novel canine microarray-related DNA sequence SeqID6940.
XX
KW canine microarray; drug screening; toxicity assay;
KW environmental pollutant; cellular response; gene expression profile;
KW toxic response; liver necrosis; fatty liver disease;
KW protein adduct formation; hepatitis; dog; ds.
XX
OS Canis familiaris.
XX
PN WO2004063324-A2.
XX
PD 29-JUL-2004.
XX
PF 05-MAY-2003; 2003WO-US013853.
XX
PR 03-MAY-2002; 2002US-0377240P.
XX
PA (GENE-) GENE LOGIC INC.
PA (PFIZ) PFIZER PROD INC.
XX
PI Diggans JC, Porter M, Wei T;
XX
DR WPI; 2004-561890/54.
XX
PT New isolated nucleic acid molecule, useful for drug screening and
PT toxicity assays or for assessing the impact, including toxicity, of a
PT compound, pharmaceutical agent or environmental pollutant on a cell or
PT living organism.
XX
PS Claim 1; SEQ ID NO 6940; 41pp; English.
XX
CC This invention is related to a novel isolated canine nucleic acid
CC sequences and the construction of canine microarrays containing a
CC significant portion of the canine genome. The isolated canine nucleic
CC acid sequences of the invention may be useful for drug screening and
CC toxicity assays. The invention is therefore useful for assessing the
CC impact, including toxicity, of a compound, pharmaceutical agent or
CC environmental pollutant on a cell or living organism. The methods are
CC useful for detecting genes that are up- or down-regulated in canines in a
CC disease state. The sequences are useful as diagnostic agents or markers
CC to detect a cellular response in a sample individually or as part of a
CC gene expression profile. It is also useful as a target for agents that
CC modulate gene expression or activity. The database is useful for
CC producing electronic Northerns that allow the user to determine the cell
CC type or tissue in which a given gene is expressed and to allow
CC determination of the abundance or expression level of a given gene in a
CC particular tissue or cell. The methods are useful for determining the
CC similarity of a toxic response to one or more individual compounds. The
CC methods are useful for predicting at least one toxic response or the
CC likelihood that a compound or test agent will induce various specific
CC pathologies such as those of the liver (liver necrosis, fatty liver
CC disease, protein adduct formation or hepatitis), those of the kidney,
CC heart, brain or testes, or other pathologies associated with at least one
CC of the toxins. The methods are also useful for predicting or elucidating
CC the potential cellular pathways influenced, induced or modulated by the
CC compound or test agent due to the similarity of the expression profile
CC compared to the profile induced by a known toxin. The present sequence is
CC that of a canine DNA sequence which was claimed for use during the
CC production of a canine microarray of the invention.
XX

SQ Sequence 715 BP; 133 A; 202 C; 194 G; 167 T; 0 U; 19 Other;

  Query Match   5.3%; Score 118; DB 13; Length 715;
  Best Local Similarity   58.8%; Pred. No. 7.9e-16;
  Matches 184; Conservative   0; Mismatches 129; Indels   0; Gaps   0;

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Qy       1405 ATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATA 1464
              |||  ||  |  | |     || | |||        ||        || ||| |  | |
Db         27 ANAGCCCCNNCNNGTTNNNNGTGTTCATNNNNNACGGTNNNNNGCCCTGGGTGTCTGACT 86

Qy       1465 TTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAAC 1524
              |  |  || | || ||  | || |  | ||||||  | |  ||||||||||||    || |
Db         87 TCAACCACCCTCATTACATGGCTGGGAGAAGAGCCTTGAAGACAGTGTTTGGCGTCGAGC 146

Qy       1525 CAGATATGATCCGGGATGGATCCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCC 1584
              | ||  ||| ||||||  ||   ||  |||||  |  |    |  || ||||||  |
Db        147 CCGACTTGACCCGGGAAGGTGGCAGTATTCCTGTGACTTTGACCTTTCAGGAGGCCACGG 206

Qy       1585 ACAAGAGCGTGGTGCTAATTCCGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATG 1644
              ||||  |||  ||||  | ||  ||||  | | ||||||  ||  |  ||  ||  |||||  |
Db        207 GGAAGAACGTCATGCTGCTGCCTGTGGGCTCAGCTGATGACGGCGCCCACTCCCAGAACG 266

Qy       1645 AGAAAATCAACAGGTGGAACTACATAGAGGGAACCAAATTATTTGCTGCCTTTTTCTTAG 1704
              ||||  ||||||||   ||||||||||| ||||||||  |  | |||||  |   | |  |
Db        267 AGAAGCTCAACAGGCTTAACTACATAGAAGGAACCAAGATGCTGGCTGCGTACCTGTATG 326

Qy       1705 AGATGGCCCAGCT 1717
              |  ||  |||||||
Db        327 AAGTGTCCCAGCT 339
```

RESULT 100
AAD33897
ID AAD33897 standard; DNA; 387 BP.
XX
AC AAD33897;
XX
DT 16-JUL-2002 (first entry)
XX
DE Human carboxypeptidase-like enzyme DNA #14.
XX
KW Human; carboxypeptidase-like enzyme; therapy; cancer; asthma; allergy;
KW chronic obstructive pulmonary disease; cytostatic; antiasthmatic;
KW antiallergic; enzyme; ds.
XX
OS Homo sapiens.
XX
PN WO200220805-A2.
XX
PD 14-MAR-2002.
XX
PF 05-SEP-2001; 2001WO-EP010203.
XX
PR 11-SEP-2000; 2000US-0231546P.
XX
PA (FARB) BAYER AG.
XX
PI Liou J;
XX
DR WPI; 2002-315660/35.
XX
PT New purified human carboxypeptidase-like enzyme, useful for identifying
PT modulators of enzyme activity for treating cancer, asthma, allergy or
PT chronic obstructive pulmonary disease.
XX
PS Disclosure; Fig 14; 127pp; English.
XX
CC The invention relates to a purified human carboxypeptidase-like enzyme.
CC The enzyme is useful for screening for agents which decrease the activity
CC of an carboxypeptidase-like enzyme. The invention is also useful for
CC treating a carboxypeptidase-like enzyme dysfunction related diseases
CC condition such as chronic obstructive pulmonary disease, cancer, asthma
CC or allergy. The invention is also useful for modulating carboxypeptidase-

```
CC   like enzyme activity in a disease condition. The invention is useful in
CC   diagnostic assays for detecting diseases and abnormalities or
CC   susceptibility to diseases and abnormalities related to presence of
CC   mutations in the nucleic acid sequences which encode the enzyme. The
CC   present sequence is human DNA encoding carboxypeptidase-like enzyme
XX
SQ   Sequence 387 BP; 87 A; 104 C; 112 G; 84 T; 0 U; 0 Other;

  Query Match             5.0%;  Score 112.6;  DB 6;  Length 387;
  Best Local Similarity   56.3%;  Pred. No. 1e-14;
  Matches  211;  Conservative    0;  Mismatches  164;  Indels    0;  Gaps    0;

Qy       1142 TCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAA 1201
Db          6 TTTGGACATAGAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCCTGCACAGCCACAA 65

Qy       1202 GGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGG 1261
Db         66 GAAAGACATCCTCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATCGAAGG 125

Qy       1262 CGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTC 1321
Db        126 CGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAGTTCTC 185

Qy       1322 AATCCGTCTAGTCCCTCACATGAATGTGTCTGCGGTGGAAAAACAGGTGACACGACATCT 1381
Db        186 CATCAGGCTCGTGCCGAACATGACTCCTGAAGTCGTCGGCGAGCAGGTCACAAGCTACCT 245

Qy       1382 TGAAGATGTGTTCTCCAAAAGAAATAGTTCCAACAAGATGGTTGTTTCCATGACTCTAGG 1441
Db        246 AACTAAGAAGTTTGCTGAACTACGCAGCCCCAATGAGTTCAAGGTGTACATGGGCCACGG 305

Qy       1442 ACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCGCAGCAAAAAGAGCGAT 1501
Db        306 TGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGGCTGGGAGAAGAGCCAT 365

Qy       1502 CAGAACAGTGTTTGG 1516
Db        366 GAAGACAGTTTTTGG 380


RESULT 101
ADL44322
ID   ADL44322 standard; DNA; 654 BP.
XX
AC   ADL44322;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #18212.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 18212; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 654 BP; 158 A; 161 C; 185 G; 150 T; 0 U; 0 Other;

  Query Match             4.8%;  Score 108.6;  DB 5;  Length 654;
  Best Local Similarity   62.2%;  Pred. No. 8.9e-14;
  Matches  171;  Conservative    0;  Mismatches  104;  Indels    0;  Gaps    0;

Qy       1426 TTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCG 1485
Db        283 TGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGG 342

Qy       1486 CAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGAT 1545
Db        343 CTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCG 402

Qy       1546 CCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTC 1605
Db        403 GCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGC 462

Qy       1606 CGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACT 1665
Db        463 CTGTGGGGTCAGCGGATGACGGAGTCCACTCCCAGAATGAAAAGCTCAACAGGTATAACT 522

Qy       1666 ACATAGAGGGAACCAAATTATTTGCTGCCTTTTTC 1700
Db        523 ACATAGAGGGAACCAAGATGCTGGCCGCGTACCTC 557


RESULT 102
ADI72799
ID   ADI72799 standard; DNA; 465 BP.
XX
AC   ADI72799;
XX
DT   20-MAY-2004  (first entry)
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XX
DE   Human ovarian cancer DNA marker #5541.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 5541; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 465 BP; 118 A; 110 C; 127 G; 110 T; 0 U; 0 Other;

  Query Match             4.6%;  Score 103.6;  DB 5;  Length 465;
  Best Local Similarity   63.0%;  Pred. No. 1e-12;
  Matches  160;  Conservative    0;  Mismatches   94;  Indels    0;  Gaps    0;

Qy       1426 TTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCG 1485
             | | ||||   |  ||     | || ||| |  |  |  |  | || | || || || | |
Db        212 TGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGG 271

Qy       1486 CAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGAT 1545
              |  | ||||||  || |  ||||| |||||     || |||||  ||| | |||| ||
Db        272 CTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCG 331

Qy       1546 CCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTC 1605
               ||  |||||  |  ||   |  || ||||||  |     |||||  |||  ||||  | |
Db        332 GCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGC 391

Qy       1606 CGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACT 1665
               |  ||||  | |  ||||| ||||  || || |||||||| ||  |||||||||  ||||
Db        392 CTGTGGGGTCAGCGGATGACGGAGTCCACTCCCAGAATGAAAAGCTCAACAGGTATAACT 451

Qy       1666 ACATAGAGGGAACC 1679
              ||||||||||||||
Db        452 ACATAGAGGGAACC 465


RESULT 103
ADL37938
ID   ADL37938 standard; DNA; 465 BP.
XX
AC   ADL37938;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #11828.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 11828; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
```

```
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 465 BP; 118 A; 110 C; 127 G; 110 T; 0 U; 0 Other;

  Query Match             4.6%;  Score 103.6;  DB 5;  Length 465;
  Best Local Similarity   63.0%;  Pred. No. 1e-12;
  Matches  160;  Conservative    0;  Mismatches   94;  Indels    0;  Gaps    0;

Qy       1426 TTTCCATGACTCTAGGACTACACCCGTGGATTGCAAATATTGATGACACCCAGTATCTCG 1485
Db        212 TGTACATGGGCCACGGTGGGAAGCCCTGGGTCTCCGACTTCAGTCACCCTCATTACCTGG 271

Qy       1486 CAGCAAAAAGAGCGATCAGAACAGTGTTTGGAACAGAACCAGATATGATCCGGGATGGAT 1545
Db        272 CTGGGAGAAGAGCCATGAAGACAGTTTTTGGTGTTGAGCCAGACTTGACCAGGGAAGGCG 331

Qy       1546 CCACCATTCCAATTGCCAAAATGTTCCAGGAGATCGTCCACAAGAGCGTGGTGCTAATTC 1605
Db        332 GCAGTATTCCCGTGACCTTGACCTTTCAGGAGGCCACGGGCAAGAACGTCATGCTGCTGC 391

Qy       1606 CGCTGGGAGCTGTTGATGATGGAGAACATTCGCAGAATGAGAAAATCAACAGGTGGAACT 1665
Db        392 CTGTGGGGTCAGCGGATGACGGAGTCCACTCCCAGAATGAAAAGCTCAACAGGTATAACT 451

Qy       1666 ACATAGAGGGAACC 1679
Db        452 ACATAGAGGGAACC 465


RESULT 104
AAS80064
ID   AAS80064 standard; cDNA; 1390 BP.
XX
AC   AAS80064;
XX
DT   13-FEB-2002  (first entry)
XX
DE   DNA encoding novel human diagnostic protein #15868.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   P-PSDB; ABG15877.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 1; SEQ ID NO 15868; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. AAS64197-AAS94564 represent novel human diagnostic
CC   coding sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1390 BP; 278 A; 397 C; 429 G; 286 T; 0 U; 0 Other;

  Query Match             4.4%;  Score 99.2;  DB 5;  Length 1390;
  Best Local Similarity   58.1%;  Pred. No. 1.3e-11;
  Matches  215;  Conservative    0;  Mismatches  148;  Indels    7;  Gaps    2;

Qy        299 GCTGTTAGAGAAAGTCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCT 358
Db        183 GCCCTCGGGGACCCTGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACT 242

Qy        359 GAAGGAGTGGGTGGCCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGA 418
Db        243 CGCAAAATGGGTGGCTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGA 296

Qy        419 GCTCTTCAGAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGC 478
Db        297 AATCAGGAGGATGATGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGA 356

Qy        479 CTCGGTGGACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCC-CG 537
Db        357 ACTGGTGGATATCGGAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTAT 416

Qy        538 TCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACT 597
Db        417 TCTGCTTCGGCAGGCTGGGCTCTGACCCACAGATGAAGACCGTGTGCATTTACGGGCACC 476

Qy        598 TGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGG 657
Db        477 TGGATGTGCAGCCTGCAGCCCTGGAGGACGGCTGGGACAGCGAGCCCTTCACCCTGGTGG 536

Qy        658 AGGTAGACGG 667
Db        537 AGCGAGACGG 546


RESULT 105
ACH17246
ID   ACH17246 standard; cDNA; 403 BP.
XX
AC   ACH17246;
XX
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DT   13-OCT-2003  (first entry)
XX
DE   Human adult heart cDNA #1560.
XX
KW   Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW   genome mapping; biodiversity; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   US2003073623-A1.
XX
PD   17-APR-2003.
XX
PF   30-JUL-2001; 2001US-00918995.
XX
PR   30-JUL-2001; 2001US-00918995.
XX
PA   (DRMA/) DRMANAC R T.
PA   (LABA/) LABAT I.
PA   (STAC/) STACHE-CRAIN B.
PA   (DICK/) DICKSON M C.
PA   (JONE/) JONES L W.
XX
PI   Drmanac RT,  Labat I,  Stache-Crain B,  Dickson MC,  Jones LW;
XX
DR   WPI; 2003-615964/58.
XX
PT   New polynucleotide sequences obtained from various cDNA libraries, useful
PT   as hybridization probes, as oligomers for PCR, for chromosome and gene
PT   mapping, in the recombinant production of protein, or in generating
PT   antisense DNA or RNA.
XX
PS   Claim 1; SEQ ID NO 4458; 44pp; English.
XX
CC   The invention relates to an isolated polynucleotide comprising any one of
CC   38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC   determined by the technique of SBH (sequencing by hybridisation). Also
CC   included is a purified polypeptide comprising a sequence corresponding to
CC   a reading frame of the novel polynucleotide. The nucleic acid sequences
CC   are useful in diagnostics as expressed sequence tags (EST) for
CC   identifying expressed genes or for physical mapping of the human genome,
CC   in forensics, in assessing biodiversities, or in identifying mutations
CC   responsible for genetic disorders and other traits. The nucleotide
CC   sequences are also useful as hybridisation probes, as oligomers for PCR,
CC   for chromosome and gene mapping, in the recombinant production of
CC   protein, or in generating antisense DNA or RNA. The purified polypeptide
CC   is useful for generating antibodies specific for it. The present sequence
CC   is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC   for this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ   Sequence 403 BP; 93 A; 97 C; 126 G; 87 T; 0 U; 0 Other;

  Query Match             4.4%;  Score 98.8;  DB 9;  Length 403;
  Best Local Similarity   59.0%;  Pred. No. 1.1e-11;
  Matches  191;  Conservative    0;  Mismatches  127;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||      | |||||||
Db         83 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 142

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |       |||   ||  ||   || ||||
Db        143 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 196

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |      | |||   ||||| | |||||    |||||| || | |
Db        197 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCGCTGTGGAACTGGTGGATATCG 256

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | || | |   |
Db        257 GAAAACAAAAGCTCCCTGATGGCTCGGAGATCCCGCTCCCTCCTATTCTGCTCGGCAGGC 316

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTG 612
              ||||   ||| ||   |||    ||||||||| | ||||| ||| |||| ||||||||||
Db        317 TGGGCTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCACCTGGATGTGCAGCCTG 376

Qy        613 CTGACCGGGGCGATGGGTGGCTCA 636
              | | || ||  || || ||   ||
Db        377 CAGCCCTGGAGGACGGCTGTGACA 400


RESULT 106
AAQ98684
ID   AAQ98684 standard; cDNA; 273 BP.
XX
AC   AAQ98684;
XX
DT   20-DEC-1995  (first entry)
XX
DE   Tr22-GSE.
XX
KW   Genetic suppressor element; Tr19-GSE; fibroblast; tumorigenesis;
KW   retrovirus; tumor; cancer; gene therapy; ss.
XX
OS   Mus sp.
XX
PN   WO9523855-A2.
XX
PD   08-SEP-1995.
XX
PF   01-MAR-1995;   95WO-US002521.
XX
PR   02-MAR-1994;   94US-00204740.
XX
PA   (UNII ) UNIV ILLINOIS FOUND.
XX
PI   Gudkov A,  Kazarov A,  Mazo I,  Roninson IB;
XX
DR   WPI; 1995-320570/41.
XX
PT   Isolation of genetic suppressor elements (GSEs) - useful in diagnostic
PT   assays for determining GSE mRNA expression levels and in the treatment of
PT   malignant cancers.
XX
PS   Example 2; Fig 16; 61pp; English.
XX
CC   Retrovirus pLNCX particles contg. a normalized random mouse NIH3T3 cDNA
CC   library were used to transfect virus-packaging NIH3T3 fibroblasts. These
CC   were inoculated into BALB/c nude mice and tumor-bearing mice were then
CC   selected. Virus was rescued from the tumors and inserts (putative
CC   tumorigenic GSEs) were sequenced. cDNA insert Tr22-GSE represents a
CC   fragment of a novel gene
XX
SQ   Sequence 273 BP; 59 A; 69 C; 101 G; 44 T; 0 U; 0 Other;

  Query Match             4.3%;  Score 96.4;  DB 2;  Length 273;
  Best Local Similarity   64.1%;  Pred. No. 3.2e-11;
  Matches  177;  Conservative    0;  Mismatches   96;  Indels    3;  Gaps    2;

Qy        427 GAATGATGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGG 486
              | |||||||  ||||| || | |    | ||| | |||||||  |    ||||     |||||
Db          1 GGATGATGGAGGTGGCAGCTGCCGATGTCCAGAGGCTGGGGGGCTCCGTGGAACTGGTGG 60

Qy        487 ACATGGGTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGG 546
              | || ||    ||| |||| || |||||    |    | ||| | |  ||     | ||||
Db         61 ATATCGGGAAGCAGAAGCTCCCAGATGGCTCGGAGATACCACTTCTCCCATC--TGCTGG 118

Qy        547 CCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGC 606
              | | || || ||||| |||  |||     ||||||||| | ||||| ||| |||||||||
Db        119 GCAAGCTAGGCAGCGACCCCCAGAAGAAAACCGTGTGCATTTACGGGCACCTGGACGTGC 178

Qy        607 AGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACG 666
              ||||||| | || ||  || ||||||  ||  || ||||       ||  ||||   || |
Db        179 AGCCTGC-GCCCTGGAGGACGGGTGGGACAGCGAGCCCTTCACCTTGGTGGAGCGGGAAG 237
```

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Qy        667 GGAAACTTTATGGACGAGGAGCGACCGACAACAAAG 702
              | || || |||||  ||||  | || ||| | || |
Db        238 GCAAGCTGTATGGGAGAGGCTCCACGGACGATAAGG 273
```

RESULT 107
ACA24244
ID ACA24244 standard; DNA; 1320 BP.
XX
AC ACA24244;
XX
DT 19-JUN-2003 (first entry)
XX
DE Prokaryotic essential gene #5901.
XX
KW Antisense; ds; prokaryotic essential gene; cell proliferation;
KW drug design; gene.
XX
OS Bacteroides fragilis.
XX
PN WO200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
DR WPI; 2003-029926/02.
DR P-PSDB; ABU20374.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 14; SEQ ID NO 12114; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
CC K. pneumoniae or P. aeruginosa. The present sequence is one of the target
CC prokaryotic essential genes. Note: The sequence data for this patent did
CC not form part of the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 1320 BP; 398 A; 274 C; 317 G; 331 T; 0 U; 0 Other;

```
  Query Match             4.2%;  Score 95;  DB 8;  Length 1320;
  Best Local Similarity   47.0%;  Pred. No. 1.1e-10;
  Matches  400;  Conservative    0;  Mismatches  440;  Indels   11;  Gaps    3;

Qy        561 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 620
              ||||| |          || ||||   | ||||  || |  ||||||  |||||| || |
Db        181 GATCCGAATGCTAAAACAGTGTTGATATACGCTCATTATGACGTGATGCCTGCCGAGCCC 240

Qy        621 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 680
                |||   ||||   |   | || |  | | |          |||||  |  |||  |
Db        241 CTCGACCTGTGGAAGAGCCAACCGTTCGAACCGGAAATACGTGACGGACATATTTGGGCG 300

Qy        681 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 740
              || |||||   |||  | || || |  |  ||     | | || ||  |           ||
Db        301 CGCGGAGCCGACGATGATAAGGGACAAGCATTTATCCAGGTGAAAGCATTTGAATATCTC 360

Qy        741 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 800
              |       |  |    ||       ||  | || || ||| |||||||    ||||||
Db        361 GTAA---AATATAACCTGCTGGAGAATAACGTAAAGTTTATCTTTGAGGGAGAAGAAGAG 417

Qy        801 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGT 860
              ||| ||      |||||| |    |     ||| |  | || ||   | |  .  | | |
Db        418 ATTGGTTCACCAAGCCTGGAAGCTTTCTGTGAAGAGCATAAAGAATTACTAAAAGCCGAT 477

Qy        861 GTGGACTACATTGTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACT 920
              ||  ||  |   |  | |   ||  || ||   |  ||           ||  || | ||
Db        478 GTTATCTTGGTATCAGATACCAGTATGTTGGGGGCCGACCTT------CCTTCACTAACC 531

Qy        921 TATGGAACCCGGGGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTT 980
                |||   || ||      ||||     | ||  | | | |     |||  ||  |
Db        532 ACCGGACTGCGTGGTCTGGCTTACTGGGAAATCGAAATAACAGGTCCTAACCGTGACCTC 591

Qy        981 CACTCAGGAACCTTTGGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTC 1040
              || || |||  |||||||||      |     | || ||    |  ||   || | |  |
Db        592 CATTCGGGACACTTTGGTGGAGCGGTAGCCAATCCGATCAACGTACTTTGTGGTATGTTA 651

Qy       1041 GGTAGCCTGGTAGACTCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTT 1100
                |||   |  | ||  |    || | ||||    | || ||| |||||||||  || |
Db        652 AGTAAGGTAATTGATACCGACGGACGTATCACAATACCCGGATTCTATGATGCTGTAGAA 711

Qy       1101 CCTCTTACAGAAGAGGAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATAC 1160
                || || |||  |||  | | |           |||||  | |  |   |||| ||||
Db        712 GAAGTTCCACAAGCAGAACGAGAAATGATTGCCCACATCCCTTTTAATGAAGAAAAATAT 771

Qy       1161 CGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGATACTAAGGAGGAGATTCTAATGCAC 1220
                |  |  || | | ||  |  || || |    || |       |    | |||
Db        772 AAGGAAGCCATCGGAGTAAAAGAACTTTTCGGTGAGAAAGGATACAGCACTCTCGAAAGA 831

Qy       1221 CTCTGGAGGTACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGA 1280
                |  |    || ||  |   |||  ||| ||   ||| |  |     | |   ||
Db        832 AACAGTTGCAGGCCTTCATTCGACATTTGTGGTATTTGGGGAGGTTACACCGGGGAAGGT 891

Qy       1281 ACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCAC 1340
              |||||||  ||  | |||  |  ||      |  ||| | |||  ||| || || ||
Db        892 TCTAAAACTGTACTCCCTTCCAAAGCCTATGCCAAAGTATCATGCCGCCTGGTTCCCCAT 951

Qy       1341 ATGAATGTGTCTGCGGTGGAAAAACAGGTGAC--ACGACATCTTGAAGATGTGTTCTCCA 1398
                ||    || | |  |||||    |  |  || |||||  | ||||    | || |
Db        952 CAAGATCATCATGTGATCTCAAAACTTTTTGCTGACTACATCCGGCAGATCGCTCCTGCT 1011

Qy       1399 AAAGAAATAGT 1409
                | | |  |||
Db       1012 ACGGTAGAAGT 1022
```

RESULT 108
AAC18056
ID AAC18056 standard; cDNA; 334 BP.
XX
AC AAC18056;
XX
DT 06-OCT-2000 (first entry)
XX
DE Human secreted protein 5' EST, SEQ ID NO: 22131.
XX
KW Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW gene therapy; chromosome mapping; ss.
XX
OS Homo sapiens.
XX
PN EP1033401-A2.
XX
PD 06-SEP-2000.
XX
PF 21-FEB-2000; 2000EP-00200610.
XX
PR 26-FEB-1999; 99US-0122487P.
XX
PA (GEST) GENSET.
XX
PI Dumas Milne Edwards J, Duclert A, Giordano J;
XX
DR WPI; 2000-500381/45.
XX
PT New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS Claim 1; SEQ ID NO 22131; 71pp + Sequence Listing; English.
XX
CC The present sequence is one of a large number of 5' ESTs derived from
CC mRNAs encoding secreted proteins. No ORF has yet been conclusively
CC identified within the present sequence. The 5' ESTs were prepared from
CC total human RNAs or polyA+ RNAs derived from 30 different tissues. EST
CC sequences usually correspond mainly to the 3' untranslated region (UTR)
CC of the mRNA because they are often obtained from oligo-dT primed cDNA
CC libraries. Such ESTs are not well suited for isolating cDNA sequences
CC derived from the 5' ends of mRNAs and even in those cases where longer
CC cDNA sequences have been obtained, the full 5' UTR is rarely included. 5'
CC ESTs are derived from mRNAs with intact 5' ends and can therefore be used
CC to obtain full length cDNAs and genomic DNAs. 5' ESTs are also used in
CC diagnostic, forensic, gene therapy and chromosome mapping procedures.
CC They are used to obtain upstream regulatory sequences and to design
CC expression and secretion vectors
XX
SQ Sequence 334 BP; 80 A; 85 C; 43 G; 123 T; 0 U; 3 Other;

Query Match 4.1%; Score 92.2; DB 3; Length 334;
Best Local Similarity 95.9%; Pred. No. 2.9e-10;
Matches 94; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

Qy 2090 CGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATC 2149
Db 1 CGTGACACATAATCATTCCATCCAATGATCGCCTTTACTTTACCACTCTTTCCTTTTATC 60

Qy 2150 TTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
Db 61 TTATTAATAAAAATGTTGGTCTCCACCACTGACTACAA 98

RESULT 109
AAC94036
ID AAC94036 standard; cDNA; 550 BP.
XX
AC AAC94036;
XX
DT 19-FEB-2001 (first entry)
XX
DE Cat flea hindgut and Malpighian tubule (HMT) cDNA, SEQ ID NO:531.
XX
KW Cat flea; hindgut and Malpighian tubule nucleic acid; HMT;
KW flea infestation; vaccine; antiparasitic; therapeutic target; diagnosis;
KW detection; ss.
XX
OS Ctenocephalides felis.
XX
PN WO200061621-A2.
XX
PD 19-OCT-2000.
XX
PF 07-APR-2000; 2000WO-US009437.
XX
PR 09-APR-1999; 99US-0128704P.
XX
PA (HESK-) HESKA CORP.
XX
PI Brandt KS, Gaines PJ, Stinchcomb DT, Wisnewski N;
XX
DR WPI; 2000-656323/63.
XX
PT Flea Malpighian tubule and head and nerve cord tissue derived nucleic
PT acids useful for the prevention, diagnosis and treatment of flea
PT infestations.
XX
PS Claim 26; Page 421; 964pp; English.
XX
CC The invention relates to novel cat flea (Ctenocephalides felis) nucleic
CC acids which are expressed in hindgut and Malpighian tubule (HMT) tissue
CC or head and nerve cord (HNC) tissue. The invention also relates to the
CC encoded proteins. The invention additionally encompasses expression
CC constructs, recombinant viruses and recombinant cells comprising the
CC nucleic acids of the invention, recombinant production of the proteins,
CC antibodies against the proteins, a method of identifying inhibitors of
CC the proteins, and compositions comprising the inhibitors for
CC administration to an animal. The nucleic acids, and the proteins they
CC encode may be used in the prevention, treatment and diagnosis of diseases
CC associated with flea infestations. For example, the nucleic acids may be
CC used to produce an HMT or HNC protein according to standard recombinant
CC DNA methodology by inserting the nucleic acids into a host cell and
CC culturing the cell to express the protein. The HMT and HNC nucleic acids
CC may also be used as DNA probes in diagnostic assays (e.g., PCR) to detect
CC and quantitate the presence of cat flea or other homologous nucleic acid
CC sequences in samples. They may also be used to study the expression and
CC function of the proteins and their role in metabolism. The HMT and HNC
CC proteins may be used as antigens in the production of specific
CC antibodies, and in assays to identify modulators (agonists and
CC antagonists) of HMT and/or HNC protein expression and activity. The anti-
CC HMT/HNC protein antibodies and antagonists may also be used to
CC downregulate protein expression and activity. The antibodies may also be
CC used as diagnostic agents for detecting the presence of flea polypeptides
CC in samples (e.g., by enzyme linked immunosorbent assay (ELISA)). The
CC present sequence represents a cat flea HMT cDNA of the invention
XX
SQ Sequence 550 BP; 182 A; 84 C; 133 G; 151 T; 0 U; 0 Other;

Query Match 4.1%; Score 92.2; DB 3; Length 550;
Best Local Similarity 52.9%; Pred. No. 3.3e-10;
Matches 243; Conservative 0; Mismatches 213; Indels 3; Gaps 2;

Qy 320 GTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGGCCATCGA 379
Db 53 GTTCAGCCACATCGACCAGAATAAGAAAAGGTACATTGATGTATTATCTGAAGCTGTAGC 112

Qy 380 GAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGATGGCCGT 439
Db 113 AATCAAATCAGTGTCGGCATGGGCAGACAGTCGACAAGAAGTTGTTAAAATGGTTAAATG 172

Qy 440 GGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGGGTCCTCA 499
Db 173 GGCTGAACAACGATTGAAGGCTCTCGGCGCAACCACAGAATTAGCAGATGTTGGAAAACA 232

```
Qy        500 GCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAG 559
              || || || ||       | ||     ||||||| ||  | ||||   |  |||| |
Db        233 AACTCTTCCAGACGGCAGAGTTATTGACTTACCTCCAGTATTGCTGGGTCAGTTGGGAAA 292

Qy        560 CGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCG 619
              ||||| |  |||    |  || || || || || || || || || || ||||| |||
Db        293 TGATCCTAAAAAACATATGGTATGTTTGTATGGACATTTAGATGTTCAGCCAGCTCTGAA 352

Qy        620 GGGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGG 679
              |  ||||| |||   || || || | |||  |||| |||  ||| || ||| | | |||
Db        353 AGAAGATGGTTGGGATACTGAACCATTTGTATTGACTGAGAAAGATGGAAAATTATTTGG 412

Qy        680 ACGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTT 739
              ||||||| |  ||  |||| || ||  | | ||  |||||  ||||  |  | | |||
Db        413 TAGAGGAGCTAGTGATGACAAGGGTCCGTTATCGG--TGGATTCATGCAAT-TGAGGCTT 469

Qy        740 CAGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATT 778
              | |       |||||| | || || || ||||||||
Db        470 ATCAACAGACTGACAAGATTTACCAGTTAACATCAAATT 508
```

RESULT 110
ABX05764
ID ABX05764 standard; DNA; 1371 BP.
XX
AC ABX05764;
XX
DT 27-OCT-2003 (revised)
DT 11-FEB-2003 (first entry)
XX
DE S. pneumoniae type 4 strain coding region #52.
XX
KW Gene; ds; bacterial meningitis; pneumonia; sepsis; otitis media;
KW ear infection; antiinflammatory; antibacterial; immunostimulant;
KW auditory; respiratory; gene therapy; vaccine.
XX
OS Streptococcus pneumoniae; type 4 strain.
XX
PN WO200277021-A2.
XX
PD 03-OCT-2002.
XX
PF 27-MAR-2002; 2002WO-IB002163.
XX
PR 27-MAR-2001; 2001GB-00007658.
XX
PA (CHIR-) CHIRON SPA.
PA (GENO-) INST GENOMIC RES.
XX
PI Masignani V, Tettelin H, Fraser C;
XX
DR WPI; 2003-040579/03.
DR P-PSDB; ABU00485.
XX
PT New proteins and nucleic acid molecules from Streptococcus pneumoniae,
PT useful as medicaments for treating or preventing a disease or infection
PT due to streptococcus bacteria, such as pneumonia, sepsis, otitis media or
PT ear infection.
XX
PS Claim 6; SEQ ID NO 103; 56pp; English.
XX
CC The invention relates to a protein comprising or having at least 50%
CC identity to any of the 2469 amino acid sequences, identified in the
CC specification (available on a computer readable format), or its fragment,
CC expressed from 2469 of 2489 identified DNA coding regions from the
CC Streptococcus pneumoniae type 4 strain genomic sequence appearing as
CC ABS56454. Also included are an antibody which binds one of the proteins,
CC treating a patient by administering the protein, DNA or antibody (in a
CC composition), a kit comprising first and second primers, which are the
CC nucleic acid cited above or fragments between nucleotides 8-100 of a
CC sequence not defined in the specification, for amplifying a target
CC sequence contained within a Streptococcus nucleic acid sequence, where
CC the first primer is substantially complementary to the target sequence
CC and the second primer is substantially complementary to the complement of
CC the target sequence, and where the parts of the primers having
CC substantial complementarity define the termini of the target sequence to
CC be amplified, assay comprising contacting a test compound with the
CC protein, and determining whether the test compound binds to the protein
CC and a Streptococcus pneumoniae bacterium, where one or more genes
CC encoding the proteins has been rendered inactive. The proteins, nucleic
CC acid molecules, antibody and compositions are useful as medicaments for
CC treating or preventing a disease or infection due to streptococcus
CC bacteria, particularly S. pneumoniae, such as pneumonia, sepsis, otitis
CC media or ear infection. They are also useful in developing vaccines,
CC diagnostics and antibiotics. The methods are useful for identifying
CC immunodominant proteins. The present sequence is one of the 2489
CC identified coding region from the genomic sequence. Note: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences. (Updated on 27-OCT-2003 to
CC standardise OS field)
XX
SQ Sequence 1371 BP; 376 A; 265 C; 368 G; 362 T; 0 U; 0 Other;

Query Match 3.8%; Score 85.8; DB 10; Length 1371;
Best Local Similarity 46.7%; Pred. No. 1.1e-08;
Matches 381; Conservative 0; Mismatches 422; Indels 12; Gaps 3;

```
Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
              ||| ||   |||||  |||||  |||     ||| || ||  |||   | |  |||
Db        250 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 309

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
              ||| || | |  |||  |||      | ||     | ||||| || || |     |||
Db        310 GAGGATCCTTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 369

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
              |||| || | ||   ||| |  | ||||  ||||    | |      |   |  |
Db        370 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 429

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
              ||| | ||||| |||||||  || |||||  |||||   ||| ||  | |  ||    | |
Db        430 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 489

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
              || ||  |   | |||||||  |    |||  |    ||  ||| | ||| |   | ||
Db        490 CTAGATAAGTATTTGGAAAAGCATGCAGACAAA---CTCCGTGGGGCGGATTTGTTGGTC 546

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
                | |              |       |||  | |||  ||  ||| |    ||||
Db        547 TGGGAACAAGGGACCAAAAATGCCTTGGAACAGCTGGAAATTTCTGGTGGCAATAAGGGG 606

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
              |       |||    |  |||| ||| ||   ||   |||| | |||||  |      |
Db        607 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAGTTATGGT 666

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
              ||||   |      |  ||   |  |   ||    ||  | |    |   |  |  |
Db        667 GGTGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCTG-- 724

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
              ||  ||| | |||| ||||     ||  | || || |||||         |  |  |||
Db        725 -CGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACAAGAGCCCAATGAACGA 783

Qy       1116 GAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGG 1175
              |||||           || |      || |       |||  |    | | | |
Db        784 GAAATGGCCTTGCTAGAAACTTATGGTCAACGAAACCCAGAGGAAGTTAGTCGGATTTAT 843

Qy       1176 GTTGAGAAATTTCTGTTCGATACTAAGGAGGAGA------TTCTAATGCACCTCTGGAGG 1229
              |    | | || |   ||       |||||  ||      ||||||  |   |||
Db        844 GGATTGGAGTTGCCTCTCTTACAGGAGGAGCGGATGGCCTTTCTAAAACGTTTCTTTTTC 903

Qy       1230 TACCCATCTCTTTCTATTCATTGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACA 1289
              | ||| | |||  ||| | || ||| ||   |  | | | |  ||   ||| ||
Db        904 GATCCAGCGCTTAATATCGAAGGAATCCAGTCTGGTTATCAAGGTCAGGGTGTTAAGACT 963
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Qy       1290 GTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTG 1349
Db        964 ATTTTACCTGCAGAAGCCAGTGCCAAGCTAGAGGTTCGTCTGGTTCCGGGCCTAGAACCG 1023

Qy       1350 TCTGCGGTGGAAAAACAGGTGACACGACATCTTGA 1384
Db       1024 CATGATGTTCTGGAAAAAATTCGGAAACAGCTAGA 1058
```

RESULT 111
ADM91824
ID ADM91824 standard; DNA; 1371 BP.
XX
AC ADM91824;
XX
DT 03-JUN-2004 (first entry)
XX
DE S pneumoniae antigenic protein-encoding gene sequence SeqID21.
XX
KW antibacterial; gene therapy; Streptococcus pneumoniae infection;
KW antigenic; gene; ds.
XX
OS Streptococcus pneumoniae.
XX
PN WO2004020609-A2.
XX
PD 11-MAR-2004.
XX
PF 02-SEP-2003; 2003WO-US027401.
XX
PR 30-AUG-2002; 2002US-0407082P.
XX
PA (TUFT) UNIV TUFTS.
XX
PI Camilli A, Hava DL;
XX
DR WPI; 2004-239189/22.
DR P-PSDB; ADM92061.
XX
PT New Streptococcus pneumoniae nucleic acid molecules, useful for
PT diagnosing, treating and preventing active infections of Streptococcus
PT pneumoniae.
XX
PS Claim 1; SEQ ID NO 21; 123pp; English.
XX
CC This invention relates to novel isolated Streptococcus pneumoniae nucleic
CC acid molecules and the antigenic polypeptides encoded by them. The
CC invention may be useful for the production of compounds with an
CC antibacterial activity or for gene therapy. The nucleic acid molecules,
CC compositions and methods disclosed are useful for treating Streptococcus
CC pneumoniae infection. The present sequence is that of an S pneumoniae
CC gene of the invention.
XX
SQ Sequence 1371 BP; 376 A; 265 C; 368 G; 362 T; 0 U; 0 Other;

Query Match 3.8%; Score 85.8; DB 12; Length 1371;
Best Local Similarity 46.7%; Pred. No. 1.1e-08;
Matches 381; Conservative 0; Mismatches 422; Indels 12; Gaps 3;

```
Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
Db        250 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 309

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
Db        310 GAGGATCCTTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 369

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
Db        370 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 429

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
Db        430 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 489

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
Db        490 CTAGATAAGTATTTGGAAAAGCATGCAGACAAA---CTCCGTGGGGCGGATTTGTTGGTC 546

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
Db        547 TGGGAACAAGGGACCAAAAATGCCTTGGAACAGCTGGAAATTTCTGGTGGCAATAAGGGG 606

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
Db        607 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAGTTATGGT 666

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
Db        667 GGTGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCTG-- 724

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
Db        725 -CGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACAAGAGCCCAATGAACGA 783

Qy       1116 GAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGG 1175
Db        784 GAAATGGCCTTGCTAGAAACTTATGGTCAACGAAACCCAGAGGAAGTTAGTCGGATTTAT 843

Qy       1176 GTTGAGAAATTTCTGTTCGATACTAAGGAGGAGA------TTCTAATGCACCTCTGGAGG 1229
Db        844 GGATTGGAGTTGCCTCTCTTACAGGAGGAGCGGATGGCCTTTCTAAAACGTTTCTTTTTC 903

Qy       1230 TACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACA 1289
Db        904 GATCCAGCGCTTAATATCGAAGGAATCCAGTCTGGTTATCAAGGTCAGGGTGTTAAGACT 963

Qy       1290 GTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTG 1349
Db        964 ATTTTACCTGCAGAAGCCAGTGCCAAGCTAGAGGTTCGTCTGGTTCCGGGCCTAGAACCG 1023

Qy       1350 TCTGCGGTGGAAAAACAGGTGACACGACATCTTGA 1384
Db       1024 CATGATGTTCTGGAAAAAATTCGGAAACAGCTAGA 1058
```

RESULT 112
ABZ42150
ID ABZ42150 standard; DNA; 1389 BP.
XX
AC ABZ42150;
XX
DT 04-MAR-2003 (first entry)
XX
DE Streptococcus pneumoniae polynucleotide SEQ ID NO 4.
XX
KW Streptococcus pneumoniae; infection; otitis media; antibacterial;
KW diagnosis; gene therapy; gene; ds.
XX
OS Streptococcus pneumoniae.
XX
PN WO200283855-A2.
XX
PD 24-OCT-2002.
XX
PF 12-APR-2002; 2002WO-US011524.
XX
PR 16-APR-2001; 2001US-0283948P.
PR 18-APR-2001; 2001US-0284443P.
XX
PA (AMCY) AMERICAN CYANAMID CO.
XX
PI Zagursky RJ, Masi AW, Green BA, Chakravarti DN, Russell DP;
PI Wooters JL;
XX
DR WPI; 2003-093010/08.

```
DR   P-PSDB; ABP81302.
XX
PT   New Streptococcus pneumoniae polynucleotides, useful for treating or
PT   preventing S. pneumoniae infections, or non-systemic diseases, e.g.
PT   otitis media, which are induced or exacerbated by S. pneumoniae.
XX
PS   Claim 1; Page 181-182; 1091pp; English.
XX
CC   The invention relates to isolated polynucleotides (ABZ72147-ABZ42522) of
CC   a Streptococcus pneumoniae genomic sequence, a fragment or degenerate
CC   variant of the polynucleotide or a nucleic acid sequence 95% identical to
CC   one of the polynucleotides. The S. pneumoniae polynucleotides and encoded
CC   polypeptides (ABP81299-ABP81674) are useful for treating or preventing S.
CC   pneumoniae infections or non-systemic diseases, e.g. otitis media, which
CC   are induced or exacerbated by S. pneumoniae. These are also useful for
CC   detecting S. pneumoniae in a biological sample or diagnosing S.
CC   pneumoniae infection in a subject. The polynucleotides have antibacterial
CC   activity and are useful in gene therapy
XX
SQ   Sequence 1389 BP; 385 A; 265 C; 374 G; 365 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 85.8;  DB 8;  Length 1389;
  Best Local Similarity   46.7%;  Pred. No. 1.1e-08;
  Matches  381;  Conservative    0;  Mismatches  422;  Indels   12;  Gaps    3;

Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
              ||| ||   |||||   |||||  |||     ||| || ||  |||   | |  |||
Db        265 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 324

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
                ||| || | |  |||  |||      | ||     | ||||| || || |     |||
Db        325 GAGGATCCTTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 384

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
              |||| || | | ||   ||| |  | | |||| ||||    |  |      |  | |
Db        385 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 444

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
              ||| | |||||  |||||||  || |||||  |||||    |||  ||  | |  ||    | |
Db        445 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 504

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
              || ||  |   | |||||||  |    |||  |    ||  |||  | |||  |   | ||
Db        505 CTAGATAAGTATTTGGAAAAGCATGCAGACAAA---CTCCGTGGGGCGGATTTGTTGGTC 561

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
                | |          |     |        |||  | |||  ||  |||  |    ||||
Db        562 TGGGAACAAGGGACCAAAAATGCCTTGGAACAGCTGGAAATTTCTGGTGGCAATAAGGGG 621

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
              |       |||     |   |||| ||| ||    ||   |||| | |||||  |       |
Db        622 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAGTTATGGT 681

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
              ||||   |      |  ||   |  |   ||    ||  | |    |   |  |  |
Db        682 GGTGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCTG-- 739

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
              ||  ||| | |||| ||||    ||  | || || |||||      |  |   |||
Db        740 -CGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACAAGAGCCCAATGAACGA 798

Qy       1116 GAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGG 1175
              |||||            || |      || |         |||   |    | | | |
Db        799 GAAATGGCCTTGCTAGAAACTTATGGTCAACGAAACCCAGAGGAAGTTAGTCGGATTTAT 858

Qy       1176 GTTGAGAAATTTCTGTTCGATACTAAGGAGGAGA------TTCTAATGCACCTCTGGAGG 1229
              |    | | || |   ||       |||||  ||      ||||||  |   |||
Db        859 GGATTGGAGTTGCCTCTCTTACAGGAGGAGCGGATGGCCTTTCTAAAACGTTTCTTTTTC 918

Qy       1230 TACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACA 1289
              | ||| | |||  |||  | || ||| ||   |  | | | |  |  ||   ||| ||
Db        919 GATCCAGCGCTTAATATCGAAGGAATCCAGTCTGGTTATCAAGGTCAGGGTGTTAAGACT 978

Qy       1290 GTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTG 1349
                |  ||||||    ||  |  |  ||  |      | ||||| || ||   | |  |   |
Db        979 ATTTTACCTGCAGAAGCCAGTGCCAAGCTAGAGGTTCGTCTGGTTCCGGGCCTAGAACCG 1038

Qy       1350 TCTGCGGTGGAAAAACAGGTGACACGACATCTTGA 1384
                ||  ||      || |  |       ||| || ||
Db       1039 CATGATGTTCTGGAAAAAATTCGGAAACAGCTAGA 1073


RESULT 113
AAV52358
ID   AAV52358 standard; DNA; 3766 BP.
XX
AC   AAV52358;
XX
DT   23-OCT-1998  (first entry)
XX
DE   Streptococcus pneumoniae genome fragment SEQ ID NO:225.
XX
KW   Streptococcus pneumoniae; S. pneumoniae; genome; diagnosis; assay;
KW   computer readable medium; vaccine; pharmaceutical composition; ds.
XX
OS   Streptococcus pneumoniae.
XX
PN   WO9818931-A2.
XX
PD   07-MAY-1998.
XX
PF   30-OCT-1997;   97WO-US019588.
XX
PR   31-OCT-1996;   96US-0029960P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Kunsch CA,  Choi GH,  Dillon PJ,  Rosen CA,  Barash SC,  Fannon M;
PI   Dougherty BA;
XX
DR   WPI; 1998-272225/24.
XX
PT   Computer-readable medium with recorded Streptococcus pneumoniae
PT   polynucleotide sequences - useful in diagnostic kits and assays, and
PT   pharmaceutical compositions and vaccines for Streptococcus pneumoniae.
XX
PS   Claim 1; Page 1239-1241; 1409pp; English.
XX
CC   The present invention describes a computer readable medium which has the
CC   nucleotide sequences SEQ ID NO:1 to 391 (AAV52134 to AAV52524) recorded
CC   on it, or a representative fragment or a sequence at least 95% identical
CC   to SEQ ID NO: 1 to 391. The nucleotide sequences depicted in SEQ ID NO:1
CC   to 391 (AAV52134 to AAV52524) are genomic fragments from Streptococcus
CC   pneumoniae. The present invention also describes an isolated nucleic acid
CC   molecule encoding a homologue of any of the fragments of the S.pneumoniae
CC   genome (SEQ ID NO:1 to 391) where the nucleic acid molecule is produced
CC   by a process comprising: (a) screening a genomic DNA library using as a
CC   probe a target sequence defined by any of the sequences in SEQ ID NO:1 to
CC   391, identifying members of the library which contain sequences that
CC   hybridise to the target sequence and isolating the nucleic acid molecules
CC   from the members; or (b) isolating mRNA, DNA or cDNA produced from an
CC   organism, amplifying nucleic acid molecules whose nucleotide sequence is
CC   homologous to amplification primers derived from the fragment of the S.
CC   pneumoniae genome to prime the amplification and isolating the amplified
CC   sequences. The computer readable medium can be used in a computer-based
CC   system for identifying fragments of the S. pneumoniae genome of
CC   commercial importance, or expression modulating fragments of the S.
CC   pneumoniae genome. Products from the present invention can be used in
CC   diagnosis kits and assays, and pharmaceutical compositions and vaccines
CC   for S. pneumoniae
XX
SQ   Sequence 3766 BP; 1143 A; 737 C; 896 G; 989 T; 0 U; 1 Other;

  Query Match             3.8%;  Score 85.8;  DB 2;  Length 3766;
  Best Local Similarity   46.7%;  Pred. No. 1.5e-08;
  Matches  381;  Conservative    0;  Mismatches  422;  Indels   12;  Gaps    3;
```

```
Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
              ||| ||   |||||   |||||  |||     ||| || ||  |||   | |  |||
Db       1233 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 1292

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
                ||| || | |  |||  |||       | ||      | |||||| || | |      |||
Db       1293 GAGGATCCKTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 1352

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
              |||| || | | ||   ||| |  | | |||| ||||     |  |      |   |  |
Db       1353 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 1412

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
              ||| | ||||| |||||||  || |||||  |||||   ||| ||  | |  ||    | |
Db       1413 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 1472

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
              || ||  |   | |||||||  |     |||  |     ||  ||| | |||  |   | ||
Db       1473 CTAGATAAGTATTTGGAAAAGCATGCAGACAAA---CTCCGTGGGGCGGATTTGTTGGTC 1529

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
                | |           |     |        |||  | |||  ||  ||| |    ||||
Db       1530 TGGGAACAAGGGACCAAAAATGCCTTGGAACAGCTGGAAATTTCTGGTGGCAATAAGGGG 1589

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
              |     |||    |  |||| ||| ||   ||   |||| | |||||  |      |
Db       1590 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAGTTATGGT 1649

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
              ||||  |       |  ||   | |   ||    ||  | |    |   |  | |
Db       1650 GGTGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCTG-- 1707

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
               ||  ||| | |||| ||||    ||  | || || |||||       |  |  |||
Db       1708 -CGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACAAGAGCCCAATGAACGA 1766

Qy       1116 GAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGG 1175
              |||||          || |    || |       |||  |    | | | |
Db       1767 GAAATGGCCTTGCTAGAAACTTATGGTCAACGAAACCCAGAGGAAGTTAGTCGGATTTAT 1826

Qy       1176 GTTGAGAAATTTCTGTTCGATACTAAGGAGGAGA------TTCTAATGCACCTCTGGAGG 1229
              |    | | || |   ||       |||||  ||      ||||||  |   |||
Db       1827 GGATTGGAGTTGCCTCTCTTACAGGAGGAGCGGATGGCCTTTCTAAAACGTTTCTTTTTC 1886

Qy       1230 TACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACA 1289
               | ||| | |||  ||| | || ||| ||    |  | | | |  |  ||   ||| ||
Db       1887 GATCCAGCGCTTAATATCGAAGGAATCCAGTCTGGTTATCAAGGTCAGGGTGTTAAGACT 1946

Qy       1290 GTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTG 1349
               |  ||||||    ||  |  |  ||  |      | ||||| || ||   | |  |   |
Db       1947 ATTTTACCTGCAGAAGCCAGTGCCAAGCTAGAGGTTCGTCTGGTTCCGGGCCTAGAACCG 2006

Qy       1350 TCTGCGGTGGAAAAACAGGTGACACGACATCTTGA 1384
                ||  ||     || |  |      ||| || ||
Db       2007 CATGATGTTCTGGAAAAAATTCGGAAACAGCTAGA 2041


RESULT 114
ABS56454_00
WP Sequence split into 22 fragments  LOCUS ABS56454 Accession Abs56454
WP     Fragment Name      Begin     End
WP     ABS56454_00            1    110000
WP     ABS56454_01       100001    210000
WP     ABS56454_02       200001    310000
WP     ABS56454_03       300001    410000
WP     ABS56454_04       400001    510000
WP     ABS56454_05       500001    610000
WP     ABS56454_06       600001    710000
WP     ABS56454_07       700001    810000
WP     ABS56454_08       800001    910000
WP     ABS56454_09       900001   1010000
WP     ABS56454_10      1000001   1110000
WP     ABS56454_11      1100001   1210000
WP     ABS56454_12      1200001   1310000
WP     ABS56454_13      1300001   1410000
WP     ABS56454_14      1400001   1510000
WP     ABS56454_15      1500001   1610000
WP     ABS56454_16      1600001   1710000
WP     ABS56454_17      1700001   1810000
WP     ABS56454_18      1800001   1910000
WP     ABS56454_19      1900001   2010000
WP     ABS56454_20      2000001   2110000
WP     ABS56454_21      2100001   2162598
ID   ABS56454 standard; DNA; 2162598 BP.
XX
AC   ABS56454;
XX
DT   27-OCT-2003  (revised)
DT   10-FEB-2003  (first entry)
XX
DE   Streptococcus pneumoniae type 4 strain complete genome.
XX
KW   ds; bacterial meningitis; pneumonia; sepsis; otitis media; genome;
KW   ear infection; antiinflammatory; antibacterial; immunostimulant;
KW   auditory; respiratory; gene therapy; vaccine.
XX
OS   Streptococcus pneumoniae; type 4 strain.
XX
PN   WO200277021-A2.
XX
PD   03-OCT-2002.
XX
PF   27-MAR-2002; 2002WO-IB002163.
XX
PR   27-MAR-2001; 2001GB-00007658.
XX
PA   (CHIR-) CHIRON SPA.
PA   (GENO-) INST GENOMIC RES.
XX
PI   Masignani V,  Tettelin H,  Fraser C;
XX
DR   WPI; 2003-040579/03.
XX
PT   New proteins and nucleic acid molecules from Streptococcus pneumoniae,
PT   useful as medicaments for treating or preventing a disease or infection
PT   due to streptococcus bacteria, such as pneumonia, sepsis, otitis media or
PT   ear infection.
XX
PS   Claim 17; SEQ ID NO 4979; 56pp; English.
XX
CC   The invention relates to a protein comprising or having at least 50%
CC   identity to any of the 2469 amino acid sequences, identified in the
CC   specification (available on a computer readable format), or its fragment,
CC   expressed from 2469 of 2489 identified DNA coding regions from the
CC   Streptococcus pneumoniae type 4 strain genomic sequence appearing as
CC   ABS56454. Also included are an antibody which binds one of the proteins,
CC   treating a patient by administering the protein, DNA or antibody (in a
CC   composition), a kit comprising first and second primers, which are the
CC   nucleic acid cited above or fragments between nucleotides 8-100 of a
CC   sequence not defined in the specification, for amplifying a target
CC   sequence contained within a Streptococcus nucleic acid sequence, where
CC   the first primer is substantially complementary to the target sequence
CC   and the second primer is substantially complementary to the complement of
CC   the target sequence, and where the parts of the primers having
CC   substantial complementarity define the termini of the target sequence to
CC   be amplified, assay comprising contacting a test compound with the
CC   protein, and determining whether the test compound binds to the protein
CC   and a Streptococcus pneumoniae bacterium, where one or more genes
CC   encoding the proteins has been rendered inactive. The proteins, nucleic
CC   acid molecules, antibody and compositions are useful as medicaments for
CC   treating or preventing a disease or infection due to streptococcus
CC   bacteria, particularly S. pneumoniae, such as pneumonia, sepsis, otitis
CC   media or ear infection. They are also useful in developing vaccines,
CC   diagnostics and antibiotics. The methods are useful for identifying
CC   immunodominant proteins. The present sequence is the Streptococcus
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CC   pneumoniae type 4 strain genome sequence. Note: The sequence data for
CC   this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences. (Updated on 27-OCT-2003 to
CC   standardise OS field)
XX
SQ   Sequence 2162598 BP; 654373A; 427176C; 431369G; 649680T; 0U; 0Other;

  Query Match             3.8%;  Score 85.8;  DB 10;  Length 110000;
  Best Local Similarity   46.7%;  Pred. No. 4.4e-08;
  Matches  381;  Conservative    0;  Mismatches  422;  Indels   12;  Gaps    3;

Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
Db      41396 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 41455

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
Db      41456 GAGGATCCTTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 41515

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
Db      41516 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 41575

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
Db      41576 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 41635

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
Db      41636 CTAGATAAGTATTTGGAAAAGCATGCAGACAAA---CTCCGTGGGGCGGATTTGTTGGTC 41692

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
Db      41693 TGGGAACAAGGGACCAAAAATGCCTTGGAACAGCTGGAAATTTCTGGTGGCAATAAGGGG 41752

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
Db      41753 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAGTTATGGT 41812

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
Db      41813 GGTGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCTG-- 41870

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
Db      41871 -CGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACAAGAGCCCAATGAACGA 41929

Qy       1116 GAAATAAATACATACAAAGCCATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGG 1175
Db      41930 GAAATGGCCTTGCTAGAAACTTATGGTCAACGAAACCCAGAGGAAGTTAGTCGGATTTAT 41989

Qy       1176 GTTGAGAAATTTCTGTTCGATACTAAGGAGGAGA------TTCTAATGCACCTCTGGAGG 1229
Db      41990 GGATTGGAGTTGCCTCTCTTACAGGAGGAGCGGATGGCCTTTCTAAAACGTTTCTTTTTC 42049

Qy       1230 TACCCATCTCTTTCTATTCATGGGATCGAGGGCGCGTTTGATGAGCCTGGAACTAAAACA 1289
Db      42050 GATCCAGCGCTTAATATCGAAGGAATCCAGTCTGGTTATCAAGGTCAGGGTGTTAAGACT 42109

Qy       1290 GTCATACCTGGCCGAGTTATAGGAAAATTTTCAATCCGTCTAGTCCCTCACATGAATGTG 1349
Db      42110 ATTTTACCTGCAGAAGCCAGTGCCAAGCTAGAGGTTCGTCTGGTTCCGGGCCTAGAACCG 42169

Qy       1350 TCTGCGGTGGAAAAACAGGTGACACGACATCTTGA 1384
Db      42170 CATGATGTTCTGGAAAAAATTCGGAAACAGCTAGA 42204

RESULT 115
ADB08961
ID   ADB08961 standard; DNA; 1455 BP.
XX
AC   ADB08961;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Alloiococcus otitis antigenic protein encoding DNA SEQ ID NO:2901.
XX
KW   Alloiococcus otitidis; antigenic protein; immunogenic; immunisation;
KW   gene therapy; Gram-positive bacterium; infection; gene; ds.
XX
OS   Alloiococcus otitis.
XX
PN   WO2003048304-A2.
XX
PD   12-JUN-2003.
XX
PF   25-NOV-2002; 2002WO-US036123.
XX
PR   29-NOV-2001; 2001US-0333777P.
PR   18-NOV-2002; 2002US-0426742P.
XX
PA   (AMHP ) WYETH HOLDINGS CORP.
XX
PI   Fletcher LD,  Mcmichael JC,  Russell DP,  Zagursky RJ;
XX
DR   WPI; 2003-505284/47.
DR   P-PSDB; ADB08962.
XX
PT   New Alloiococcus otitidis polynucleotides and polypeptides, useful for
PT   treating and diagnosing diseases, drug screening assays and monitoring of
PT   effects during drug clinical trials.
XX
PS   Claim 7; SEQ ID NO 2901; 1019pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) of
CC   Alloiococcus otitidis genomic DNA, which encodes an antigenic protein.
CC   Alloiococcus otitidis is a Gram-positive bacterium. Also described: (1)
CC   an isolated polypeptide that is encoded by the polynucleotide (I); (2) an
CC   expression vector comprising the novel isolated polynucleotide (I), its
CC   complement, degenerate variant or fragment; (3) a genetically engineered
CC   host cell, transfected, transformed or infected with the vector of (2);
CC   (4) an antibody specific for the polypeptide of (1); (5) an immunogenic
CC   composition comprising the polypeptide, its complement, biological
CC   equivalent or fragment, or the polynucleotide that is comprised in the
CC   expression vector; (6) a pharmaceutical composition comprising the
CC   polypeptide of (1) and a carrier; (7) a protein chip comprising an array
CC   of the polypeptides of (1), their biological equivalent or fragment; (8)
CC   immunising against Alloiococcus otitidis by administering to a host the
CC   immunogenic composition; (9) detecting and/or identifying Alloiococcus
CC   otitidis in the biological sample; (10) a kit comprising a container
CC   containing the novel polynucleotide, its degenerate variant or fragment,
CC   or the antibody of (4); and (11) producing a polypeptide by culturing the
CC   genetically engineered host cell under conditions suitable to produce the
CC   polypeptide from the culture. (I) can be used in gene therapy. The
CC   polynucleotides, polypeptides, antibodies and compositions of the present
CC   invention can be used for treating and diagnosing diseases, drug
CC   screening assays and monitoring of effects during drug clinical trials.
CC   The polynucleotides are useful for expressing and detecting Alloiococcus
CC   otitidis. The present sequence encodes an Alloiococcus otitidis antigen
CC   protein from the present invention.
XX
SQ   Sequence 1455 BP; 413 A; 337 C; 357 G; 348 T; 0 U; 0 Other;

  Query Match             3.8%;  Score 85.2;  DB 9;  Length 1455;
  Best Local Similarity   55.9%;  Pred. No. 1.6e-08;
  Matches  162;  Conservative    0;  Mismatches  128;  Indels    0;  Gaps    0;

Qy        561 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 620
Db        298 GAAGCCAACAAGCCGACCTTACTCATTTACAACCACTATGATGTCCAGCCGGAAGACCCG 357

Qy        621 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 680
Db        358 GTTGAGGAGTGGCGAACTAGACCCTTTGAACCAGTTGAAAAAGACGGGGCCATCTATTGC 417
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Qy        681 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 740
              || || | | || ||||| | |     | | ||  || |||||||  |       ||||
Db        418 CGGGGTGTGTCTGATAACAAGGCCAACTTGATTGCCCGGCTCAATGCCATCCAGCTCTTC 477

Qy        741 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 800
                ||      | | |  || ||  | ||||| || ||| ||||||| |||   ||||||
Db        478 TTAGAAGACCATGATGGCCTGCCGATCAATATTAAGTTCCTCATTGAAGGGGAAGAAGAG 537

Qy        801 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATT 850
                ||   |||   | | || ||   | | |   || |  |||||   ||
Db        538 ATCGGTAGTGTCCACATTGATGATTATTTAGCCCAATACCAGGACAAGTT 587


RESULT 116
ADB12064_07
Continuation (8 of 18) of ADB12064 from base 700001 (Alloiococcus otitis entire genome s
WP Sequence split into 18 fragments  LOCUS ADB12064 Accession Adb12064
WP      Fragment Name       Begin      End
WP      ADB12064_00             1    110000
WP      ADB12064_01        100001    210000
WP      ADB12064_02        200001    310000
WP      ADB12064_03        300001    410000
WP      ADB12064_04        400001    510000
WP      ADB12064_05        500001    610000
WP      ADB12064_06        600001    710000
WP      ADB12064_07        700001    810000
WP      ADB12064_08        800001    910000
WP      ADB12064_09        900001   1010000
WP      ADB12064_10       1000001   1110000
WP      ADB12064_11       1100001   1210000
WP      ADB12064_12       1200001   1310000
WP      ADB12064_13       1300001   1410000
WP      ADB12064_14       1400001   1510000
WP      ADB12064_15       1500001   1610000
WP      ADB12064_16       1600001   1710000
WP      ADB12064_17       1700001   1754382

  Query Match             3.8%;  Score 85.2;  DB 9;  Length 110000;
  Best Local Similarity   55.9%;  Pred. No. 6e-08;
  Matches  162;  Conservative    0;  Mismatches  128;  Indels    0;  Gaps    0;

Qy        561 GATCCCACGAAAGGCACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGG 620
              ||  |||  ||    ||| |   | | |||  |||||  || || ||||| |  |||| |
Db      61000 GAAGCCAACAAGCCGACCTTACTCATTTACAACCACTATGATGTCCAGCCGGAAGACCCG 61059

Qy        621 GGCGATGGGTGGCTCACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGA 680
              |  || | |||||  ||   |||| ||  |    ||  |||||||    | ||| |
Db      61060 GTTGAGGAGTGGCGAACTAGACCCTTTGAACCAGTTGAAAAAGACGGGGCCATCTATTGC 61119

Qy        681 CGAGGAGCGACCGACAACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTC 740
              || || | | || ||||| | |     |  | ||  || |||||||  |       ||||
Db      61120 CGGGGTGTGTCTGATAACAAGGCCAACTTGATTGCCCGGCTCAATGCCATCCAGCTCTTC 61179

Qy        741 AGAGCCCTGGAGCAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAG 800
                ||      | | |  || ||  | ||||| || ||| ||||||| |||   ||||||
Db      61180 TTAGAAGACCATGATGGCCTGCCGATCAATATTAAGTTCCTCATTGAAGGGGAAGAAGAG 61239

Qy        801 GCTGGCTCTGTTGCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATT 850
                ||   |||   | | || ||   | | |   || |  |||||   ||
Db      61240 ATCGGTAGTGTCCACATTGATGATTATTTAGCCCAATACCAGGACAAGTT 61289


RESULT 117
AAX91990_11/c
Continuation (12 of 13) of AAX91990 from base 1100001 (Nucleotide sequence of the comple
WP Sequence split into 13 fragments  LOCUS AAX91990 Accession Aax91990
WP      Fragment Name       Begin      End
WP      AAX91990_00             1    110000
WP      AAX91990_01        100001    210000
WP      AAX91990_02        200001    310000
WP      AAX91990_03        300001    410000
WP      AAX91990_04        400001    510000
WP      AAX91990_05        500001    610000
WP      AAX91990_06        600001    710000
WP      AAX91990_07        700001    810000
WP      AAX91990_08        800001    910000
WP      AAX91990_09        900001   1010000
WP      AAX91990_10       1000001   1110000
WP      AAX91990_11       1100001   1210000
WP      AAX91990_12       1200001   1230025

  Query Match             3.6%;  Score 80;  DB 2;  Length 110000;
  Best Local Similarity   48.5%;  Pred. No. 8.3e-07;
  Matches  255;  Conservative    0;  Mismatches  265;  Indels    6;  Gaps    1;

Qy        586 TCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCT 645
              ||||  |||||  || |||||||| ||  | |     ||||| |||     || ||||
Db      36774 TCTATAACCACTATGATGTGCAGCCAGCACAGCTATCTGATGGTTGGAAGGGAGATCCCT 36715

Qy        646 ATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCC 705
              | | || |  || |   | || || || |||| |||||||| | || |||||||| |
Db      36714 TTATCCTTAGAGAAGAGAATGGCAATCTCTATGCCCGAGGAGCCTCTGATAACAAAGGAC 36655

Qy        706 CTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTG 765
                ||        | || ||  |      ||      |      |   | |  | |||
Db      36654 AATGTTTTTACACCTTAAAGGCATTACAGCACTATTACGAATCTCAAGGAAACTTCCCTC 36595

Qy        766 TGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAAC 825
              | ||||| |  |  | ||||||||     ||||||  |||   | | ||  |
Db      36594 TAAATATTATTTGGTTAATTGAGGGTGAAGAAGAGAGTGGGAGTCTCGCATTATTTACTT 36535

Qy        826 TTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATA 885
              | |||||  |||| ||    ||       | | ||||||  || | ||   ||||
Db      36534 GGTTAGAAAAGAAAAAAGAAGCTTT------ACGCGCGGACTATCTTCTGATCGTAGATG 36481

Qy        886 ACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACT 945
                |   |     |||   | ||     | |    |||| | ||||| |      | ||
Db      36480 GGGGTTTCCTTTCTGAAAAACACCCCTACGTAAGCATTGGAGCTCGGGGTATTGTTTCCA 36421

Qy        946 TCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCC 1005
              | |   |   | ||   |  || |||| | |||||||||   || || || ||
Db      36420 TGAAAATCTCCCTTGAAGAGGGGAACAAGGACATGCACTCAGGAGTTTTAGGAGGAATTG 36361

Qy       1006 TTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTC 1065
                |  | | |    || | |    |  |||| |    |||    || | |      |
Db      36360 CCTACAATACGAATCGTGCTTTATCAGAAATTCTGAGCTCTCTGCATCACCCTGACAATT 36301

Qy       1066 ATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGA 1111
                |||      |   ||| | |||||||| | | ||  |   | ||
Db      36300 CTATAGCTATTGAAGGATTTTATGATGATCTTGCTCTCCCCTCGGA 36255


RESULT 118
AAS59535/c
ID   AAS59535 standard; DNA; 26309 BP.
XX
AC   AAS59535;
XX
DT   13-FEB-2002  (first entry)
XX
DE   Propionibacterium acnes immunogenic protein encoding DNA #30.
XX
KW   SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
KW   uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
KW   inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
KW   dermatological; osteopathic; neuroprotectant; ds.
XX
OS   Propionibacterium acnes.
XX
PN   WO200181581-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US012865.
XX
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PR   21-APR-2000; 2000US-0199047P.
PR   02-JUN-2000; 2000US-0208841P.
PR   07-JUL-2000; 2000US-0216747P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Skeiky YAW,  Persing DH,  Mitcham JL,  Wang SS,  Bhatia A;
PI   L'maisonneuve J,  Zhang Y,  Jen S,  Carter D;
XX
DR   WPI; 2001-616774/71.
XX
PT   Propionibacterium acnes polypeptides and nucleic acids useful for
PT   vaccinating against and diagnosing infections, especially useful for
PT   treating acne vulgaris.
XX
PS   Claim 1; SEQ ID NO 30; 1069pp; English.
XX
CC   Sequences AAS59506-AAS59804 represent DNA molecules encoding
CC   Propionibacterium acnes immunogenic polypeptides. The proteins and their
CC   associated DNA sequences are used in the treatment, prevention and
CC   diagnosis of medical conditions caused by P. acnes. The disorders include
CC   SAPHO syndrome (synovitis, acne, pustulosis, hypertosis and
CC   osteomyelitis), uveitis and endophthalmitis. P. acnes is also involved in
CC   infections of bone, joints and the central nervous system, however it is
CC   particularly involved in the inflammatory lesions associated with acne
CC   vulgaris. A method for detecting the presence or absence of P. acnes in a
CC   patient comprises contacting a sample with a binding agent that binds to
CC   the proteins of the invention and determining the amount of bound protein
CC   in the sample. The polypeptides may be used as antigens in the production
CC   of antibodies specific for P. acnes proteins. These antibodies can be
CC   used to downregulate expression and activity of P. acnes polypeptides and
CC   therefore treat P. acnes infections. The antibodies may also be used as
CC   diagnostic agents for determining P. acnes presence, for example, by
CC   enzyme linked immunosorbent assay (ELISA). This sequence encodes the
CC   polypeptides shown in AAU46704-AAU46985 and AAU67509. Note: The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 26309 BP; 5546 A; 8173 C; 7885 G; 4699 T; 0 U; 6 Other;

  Query Match             3.6%;  Score 79.8;  DB 4;  Length 26309;
  Best Local Similarity   49.0%;  Pred. No. 5.9e-07;
  Matches  281;  Conservative    0;  Mismatches  277;  Indels   15;  Gaps    2;

Qy        531 CCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTAC 590
              | ||||||   || | ||| |   | |      |      |    ||| ||     | |||
Db      14609 CTTCCCGCTGTCATCGCCCACTGGCCGGCGCCTGAGGGTATGCCCACTGTCCTGCTGTAC 14550

Qy        591 GGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTG 650
                ||||   ||||| || ||  | | |      |||| |||||  || || ||||  ||
Db      14549 TCCCACGGTGACGTCCAACCCACCGGCAACCTTGATGAGTGGCATACTGAACCCTTCGTC 14490

Qy        651 CTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTC 710
                || |    ||  | |   || ||||| || ||  |  ||||| |||||||    |||
Db      14489 GCCACCGCCAAAGGTGAGCGTCTCTATGGTCGTGGCACCGCCGACGACAAAGGTGGCGTC 14430

Qy        711 TTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAAT 770
                ||           | ||  |||| |  | ||| | ||     | |  || ||
Db      14429 GCCGCC---------CATCTGGCCGCCATTCGTGCCTTCGACGGCAAGCCCCCAGTCGGC 14379

Qy        771 ATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTG 830
              |||   || || | |||||   ||| |||   ||||| | | |  ||||||   | | .
Db      14378 GTCACCCTCTTCGTCGAGGGCGAGGAGGAGATCGGCTCGGCTTCTATGGAGGTCATCATC 14319

Qy        831 GAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTG 890
              |   | | ||||||    |  | | |  ||   |   | |    ||| |  |||  |
Db      14318 GCCGAGCACAAGGACGAGCTGGCCGCCGACGTCATCGTTGTCGCCGATTCGGTCAACTGG 14259

Qy        891 TGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATG 950
              |      ||  |    ||  |  | ||           || ||   |  | ||| |||
Db      14258 GAG------CAGGGCGTCCCTTCCGTGACGACCACCCTGCGCGGCGTCGTCGACTGCATC 14205

Qy        951 GTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCAT 1010
              || |||||      |   ||||| |  || || || ||    ||||| |||||| | |
Db      14204 GTCGAGGTCTCCACCCTCGACCACGCCTTGCATTCCGGCCAGTTTGGCGGCATCGTGCCC 14145

Qy       1011 GAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATC 1070
              ||  |  || |   |||  |   ||| |||  | |||     |||  | | |||  |  ||
Db      14144 GATGCCTTGACCACCCTGTGTCGACTTATCGCCACCCTTCACGACGGGACCGGTGAGGTC 14085

Qy       1071 CTGGTCCCTGGAATCTATGATGAAGTGGTTCCT 1103
                 |||   ||  |  | |     | ||  |||
Db      14084 ACCGTCGACGGGTTGCAGGGATTCGCGGGCCCT 14052


RESULT 119
ACF64464/c
ID   ACF64464 standard; DNA; 26309 BP.
XX
AC   ACF64464;
XX
DT   17-OCT-2003  (first entry)
XX
DE   Propionibacterium acnes DNA contig sequence #30.
XX
KW   Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW   immunostimulant; immune response; vaccine; ds.
XX
OS   Propionibacterium acnes.
XX
PN   WO2003033515-A1.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032727.
XX
PR   15-OCT-2001; 2001US-00978825.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Mitcham JL,  Skeiky YAW,  Persing DH,  Bhatia A,  Maisonneuve JL;
PI   Zhang Y,  Wang S,  Jen S,  Lodes MJ,  Benson DR,  Jones R,  Carter D;
PI   Barth B,  Vallieve-Douglass J;
XX
DR   WPI; 2003-381789/36.
XX
PT   New Propionibacterium acnes polypeptides and polynucleotides encoding the
PT   polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
PT   or for stimulating an immune response specific for a P. acnes protein.
XX
PS   Claim 1; SEQ ID NO 30; 1481pp; English.
XX
CC   The invention relates to an isolated polynucleotide (ACF64435-ACF64733)
CC   encoding a Propionibacterium acnes protein. The invention also relates to
CC   polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to
CC   immunogenic fragments of P. acnes polypeptides. The invention
CC   additionally encompasses expression vectors and host cells comprising a
CC   polynucleotide of the invention; antibodies against polypeptides of the
CC   invention; fusion proteins comprising a polypeptide of the invention; a
CC   method for stimulating an immune response specific for a P. acnes
CC   polypeptide and an isolated T cell population comprising T cells prepared
CC   via this method; a vaccine composition (comprising P. acnes polypeptides,
CC   polynucleotides, antibodies, fusion proteins, T cell populations, or
CC   antigen-presenting cells that express the polypeptide); a method and kit
CC   for detecting or determining the presence or absence of P. acnes in a
CC   patient; and a method for inhibiting the development of P. acnes in a
CC   patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion
CC   proteins, T cell populations or antigen-presenting cells that express the
CC   polypeptides are useful for diagnosing, preventing or treating acne
CC   vulgaris, or for stimulating an immune response specific for a P. acnes
CC   protein. The polynucleotides can also be used as probes or primers for
CC   nucleic acid hybridisation. The vaccine composition is useful for the
CC   stimulation of an immune response against P. acnes, or for treating acne,
CC   and the kit is useful for performing a diagnostic assay. The present
CC   sequence represents a P. acnes DNA contig which is specifically claimed
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CC   in the invention. Note: The sequence data for this patent did not form
CC   part of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 26309 BP; 5546 A; 8173 C; 7885 G; 4699 T; 0 U; 6 Other;

  Query Match             3.6%;  Score 79.8;  DB 8;  Length 26309;
  Best Local Similarity   49.0%;  Pred. No. 5.9e-07;
  Matches  281;  Conservative    0;  Mismatches  277;  Indels   15;  Gaps    2;

Qy        531 CCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTAC 590
              | |||||   || | ||| |   |  |     |       |    ||| ||     | |||
Db      14609 CTTCCCGCTGTCATCGCCCACTGGCCGGCGCCTGAGGGTATGCCCACTGTCCTGCTGTAC 14550

Qy        591 GGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGACCCCTATGTG 650
              ||||  |||||| || ||  | | |       |||| |||||  || || ||||  ||
Db      14549 TCCCACGGTGACGTCCAACCCACCGGCAACCTTGATGAGTGGCATACTGAACCCTTCGTC 14490

Qy        651 CTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGACAACAAAGGCCCTGTC 710
              || |   ||  | |  || ||||| || ||  |  ||||| |||||||    |||
Db      14489 GCCACCGCCAAAGGTGAGCGTCTCTATGGTCGTGGCACCGCCGACGACAAAGGTGGCGTC 14430

Qy        711 TTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGATCTTCCTGTGAAT 770
              ||           | ||  |||| |  | ||| | ||     | |  || ||
Db      14429 GCCGCC---------CATCTGGCCGCCATTCGTGCCTTCGACGGCAAGCCCCCAGTCGGC 14379

Qy        771 ATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTGGAGGAACTTGTG 830
              |||   || || | |||||   ||| |||   ||||| | | |  ||||||   |  |
Db      14378 GTCACCCTCTTCGTCGAGGGCGAGGAGGAGATCGGCTCGGCTTCTATGGAGGTCATCATC 14319

Qy        831 GAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATTTCAGATAACCTG 890
              |   | | ||||||    |  | | |  ||    |    | |    ||| |  |||  |
Db      14318 GCCGAGCACAAGGACGAGCTGGCCGCCGACGTCATCGTTGTCGCCGATTCGGTCAACTGG 14259

Qy        891 TGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGGAACAGCTACTTCATG 950
              |      ||  |   ||  | | ||          || ||   |  | ||| |||
Db      14258 GAG------CAGGGCGTCCCTTCCGTGACGACCACCCTGCGCGGCGTCGTCGACTGCATC 14205

Qy        951 GTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTTGGTGGCATCCTTCAT 1010
              || |||||       |   ||||| |  || || || ||    ||||| |||||| | |
Db      14204 GTCGAGGTCTCCACCCTCGACCACGCCTTGCATTCCGGCCAGTTTGGCGGCATCGTGCCC 14145

Qy       1011 GAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGACTCGTCTGGTCATATC 1070
              ||  |  || |    |||  |   ||| ||| | |||    |||  | | ||| |  ||
Db      14144 GATGCCTTGACCACCCTGTGTCGACTTATCGCCACCCTTCACGACGGGACCGGTGAGGTC 14085

Qy       1071 CTGGTCCCTGGAATCTATGATGAAGTGGTTCCT 1103
                 |||  ||  |  | |     | ||  |||
Db      14084 ACCGTCGACGGGTTGCAGGGATTCGCGGGCCCT 14052


RESULT 120
ACH80302
ID   ACH80302 standard; DNA; 582 BP.
XX
AC   ACH80302;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human genome derived single exon probe #13497.
XX
KW   Human; probe; ss; gene expression; single exon probe; microarray;
KW   alternative splicing event; genomic alteration.
XX
OS   Homo sapiens.
XX
PN   US2003194704-A1.
XX
PD   16-OCT-2003.
XX
PF   03-APR-2002; 2002US-00029386.
XX
PR   03-APR-2002; 2002US-00029386.
XX
PA   (PENN/) PENN S G.
PA   (RANK/) RANK D R.
PA   (HANZ/) HANZEL D K.
XX
PI   Penn SG,  Rank DR,  Hanzel DK;
XX
DR   WPI; 2004-119264/12.
XX
PT   New human genome-derived single exon nucleic acid probes useful for human
PT   gene expression analysis, for identifying or characterizing alternative
PT   splicing events, for assessing genomic alterations or as tools for
PT   surveying tissues.
XX
PS   Claim 15; SEQ ID NO 13497; 80pp; English.
XX
CC   The invention relates to a nucleic acid probe for measuring human gene
CC   expression, comprising any of the 27,400 fully defined nucleotide
CC   sequences in the specification, or their complements or fragments, and
CC   encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC   fully defined in the specification. The probe is a single exon probe that
CC   hybridises under high stringency conditions to a nucleic acid molecule
CC   expressed in human cells or tissues. Also included are a spatially-
CC   addressable set of single exon nucleic acid probes for measuring human
CC   gene expression (comprising a plurality of single exon nucleic acid
CC   probes cited above, where each of the plurality of probes is separately
CC   and addressably isolatable or amplifiable from the plurality), a single
CC   exon microarray for measuring human gene expression, a method of
CC   measuring human gene expression, a vector comprising the single exon
CC   probe cited above, an ORF-encoded peptide comprising at least 8
CC   contiguous amino acids of any of the above- mentioned amino acid
CC   sequences (optionally with conservative amino acid substitutions), an
CC   isolated antibody that binds specifically to a peptide cited above,
CC   methods of selling and/or licensing single exon probes or microarrays to
CC   a customer desiring to measure gene expression, a method of providing
CC   human gene expression data by subscription, and a computer-readable
CC   storage medium which contains a database having a plurality of records
CC   (each record including data on the expression of a single exon probe
CC   cited above. The probe, methods and apparatus are useful in gene
CC   expression analysis. The probes may be used as tools for surveying
CC   tissues to detect the presence of expressed messages that contain their
CC   specific exon, or in constructing genome-derived single exon microarrays.
CC   In addition, the probes are used in identifying and characterising
CC   alternative splicing events, in detecting and characterising gross
CC   alterations in the genomic locus that includes their exon, in assessing
CC   smaller genomic alterations, in priming the synthesis of nucleic acids,
CC   or in expressing the ORF-encoded peptide. The present sequence is a human
CC   single exon probe of the invention. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ   Sequence 582 BP; 135 A; 148 C; 167 G; 132 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 79.4;  DB 12;  Length 582;
  Best Local Similarity   60.4%;  Pred. No. 2.2e-07;
  Matches  131;  Conservative    0;  Mismatches   86;  Indels    0;  Gaps    0;

Qy        753 CAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTT 812
              || ||  ||||||| ||  ||  ||||  | | || || ||||| ||| | |||||||
Db        278 CAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAG 337

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
              | ||| || || ||  |           || |||  ||||||     | |||||||||  |
Db        338 GGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTATGTC 397

Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
                |||||  || ||     ||| |  |  | | ||||||    |||| || ||   | ||
Db        398 TGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGG 457

Qy        933 GGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAG 969
              || |   |||||||  |  | |||||  | |||  ||
Db        458 GGCATTTGCTACTTTTTCATCGAGGTACAGTGCCAAG 494
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RESULT 121
ADR92406
ID   ADR92406 standard; DNA; 912 BP.
XX
AC   ADR92406;
XX
DT   16-DEC-2004  (first entry)
XX
DE   Novel S. pneumoniae DNA sequence, SEQ ID 1041.
XX
KW   Meningitis; bacteraemia; pneumonia; otitis media; ds;
KW   bacterial infection.
XX
OS   Streptococcus pneumoniae.
XX
PN   US6800744-B1.
XX
PD   05-OCT-2004.
XX
PF   30-JUN-1998;   98US-00107433.
XX
PR   02-JUL-1997;   97US-0051553P.
PR   12-MAY-1998;   98US-0085131P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Doucette-Stamm LA,  Bush D;
XX
DR   WPI; 2004-697205/68.
DR   P-PSDB; ADR95009.
XX
PT   New isolated nucleic acid encoding a Streptococcus pneumoniae
PT   polypeptide, useful for diagnosing, preventing and/or treating
PT   pathological conditions resulting from the bacterial infection.
XX
PS   Disclosure; SEQ ID NO 1041; 151pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising a sequence
CC   encoding a Streptococcus pneumoniae ADR91366polypeptide, or its
CC   fragments, with any of 9 fully defined sequences (appearing as ADR94308,
CC   ADR94489, ADR94800, ADR94837, ADR94969, ADR95253, ADR95642, ADR95682,
CC   ADR96079) or any of the fully defined sequences appearing as ADR91705,
CC   ADR91886, ADR92197, ADR92234, ADR93039, ADR93079, ADR92366, ADR92650 or
CC   ADR93476 or at least 20 or 30 consecutive nucleotides of the nucleotide
CC   sequences, or at least 40, 60 or 300 consecutive nucleotides, which is
CC   hybridisable under high stringency conditions to the nucleotide sequence.
CC   The nucleic acids and proteins are chosen from 5206 disclosed sequences.
CC   Also included are a recombinant expression vector comprising the isolated
CC   nucleic acid cited above operably linked to a transcription regulatory
CC   element, a cell comprising the recombinant expression vector and a probe
CC   comprising at least 20 consecutive nucleotides of the nucleotide
CC   sequences as cited above. The methods and compositions of the present
CC   invention are useful for the diagnosis, prevention and/or treatment of
CC   pathological conditions resulting from bacterial infection by
CC   Streptococcus pneumoniae e.g. pneumonia, bacteraemia, meningitis and
CC   otitis media. The present sequence is one of the 2603 disclosed S.
CC   pneumoniae nucleic acid sequences. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=6800744B1.
XX
SQ   Sequence 912 BP; 238 A; 179 C; 251 G; 244 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 79.4;  DB 13;  Length 912;
  Best Local Similarity   49.2%;  Pred. No. 2.5e-07;
  Matches  268;  Conservative    0;  Mismatches  271;  Indels    6;  Gaps    2;

Qy        576 ACCGTGTGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTC 635
              ||| ||   |||||   |||||  |||     ||| || ||  |||   | |  |||
Db        163 ACCTTGATTTTCTATAACCACTATGACACTGTGCCAGCGGATGGGGATCAGGTCTGGACA 222

Qy        636 ACGGACCCCTATGTGCTGACGGAGGTAGACGGGAAACTTTATGGACGAGGAGCGACCGAC 695
              ||| || | |  |||  |||       | ||      | ||||| || || |     |||
Db        223 GAGGATCCTTTTACGCTTTCGGTCCGCAATGGCTTCATGTATGGGCGTGGGGTTGATGAC 282

Qy        696 AACAAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAA 755
              |||| || | | ||   ||| |  | | |||| ||||    |  |      |  |  |
Db        283 GACAAGGGTCATATCACAGCTCGCTTGAGTGCTTTGAGAAAATATATGCAGCACCATGAT 342

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
              ||| | ||||| |||||||  || |||| ||||   ||| ||  | |  ||    | |
Db        343 GATTTACCTGTCAATATCAGCTTTATCATGGAGGGAGCGGAGGAATCGGCTTCAACAGAC 402

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
              || ||  |   | |||||||  |    |||  | ||    ||| | |||  |   | ||
Db        403 CTAGATAAGTATTTGGAAAAGCATGCAGACAAACTCC---ATGGGGCGGATTTGTTGGTC 459

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
                | |           |   |       | |  | |||  ||  ||| |    ||||
Db        460 TGGGAACAAGGGACCAAAAATGCCTTGGAACAACTGGAAATTTCTGGTGGCAATAAGGGG 519

Qy        936 AACAGCTACTTCATGGTGGAGGTGAAATGCAGAGACCAGGATTTTCACTCAGGAACCTTT 995
              |     |||   |   |||| ||| ||   ||   |||| | |||||  |   | |
Db        520 ATTGTGACCTTTGATGCCAAGGTAAAAAGCGCTGATGTGGATATCCACTCGAG---TTAT 576

Qy        996 GGTGGCATCCTTCATGAACCAATGGCTGATCTGGTTGCTCTTCTCGGTAGCCTGGTAGAC 1055
              |||||| |  |  |   | |         ||||  |         |       ||   |
Db        577 GGTGGCGTTGTGGAATCAGCTCCTTGGTATCTCCTCCAAGCCTTACAGTCTCTTCGTGCT 636

Qy       1056 TCGTCTGGTCATATCCTGGTCCCTGGAATCTATGATGAAGTGGTTCCTCTTACAGAAGAG 1115
              ||  ||| | |||| ||||    ||  | || || |||||   |   |  |  |||
Db        637 GCGGATGGCCGTATCTTGGTTGAAGGCTTGTACGAAGAAGTACATGAGCCCAATGAACGA 696

Qy       1116 GAAAT 1120
              |||||
Db        697 GAAAT 701


RESULT 122
AAK85123
ID   AAK85123 standard; DNA; 24788 BP.
XX
AC   AAK85123;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen genomic sequence SEQ ID NO:39935.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
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PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
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PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Disclosure; SEQ ID NO 39935; 3071pp + Sequence Listing; English.
XX
CC AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC activity, and can be used in gene therapy and vaccine production. (I)
CC proteins and polynucleotides may be used in the prevention, diagnosis and
CC treatment of diseases associated with inappropriate (I) expression. For
CC example, they may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of (I) by expressing inactive proteins or to
CC supplement the patients own production of (I). Additionally, (I)
CC polynucleotides may be used to produce the secreted (I), by inserting the
CC nucleic acids into a host cell and culturing the cell to express the
CC protein. (I) proteins and polynucleotides may be used to prevent,
CC diagnose and treat immune/haematopoietic-related diseases, especially

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CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
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SQ   Sequence 24788 BP; 5726 A; 5995 C; 6603 G; 6464 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 79.4;  DB 4;  Length 24788;
  Best Local Similarity   60.4%;  Pred. No. 7.1e-07;
  Matches  131;  Conservative    0;  Mismatches   86;  Indels    0;  Gaps    0;

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Db      14469 CAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAG 14528

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
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Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
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DT   07-NOV-2001  (first entry)
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KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis; ds.
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OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
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PR   31-JAN-2000; 2000US-0179065P.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Disclosure; SEQ ID NO 32661; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 24788 BP; 5726 A; 5995 C; 6603 G; 6464 T; 0 U; 0 Other;

  Query Match             3.5%;  Score 79.4;  DB 4;  Length 24788;
  Best Local Similarity   60.4%;  Pred. No. 7.1e-07;

  Matches  131;  Conservative    0;  Mismatches   86;  Indels    0;  Gaps    0;

Qy        753 CAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTT 812
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Db      14469 CAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAG 14528

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
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Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
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DT   07-NOV-2001  (first entry)
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DE   Genomic sequence #1 encoding for novel human ADAM or serine protease.
XX
KW   Human; ADAM; a disintegrin and metalloprotease domain; adamalysin;
KW   serine protease; cancer; immune disease; blood-related disorder; HMWFM73;
KW   hyperproliferative disorder; renal disorder; cardiovascular disorder;
KW   respiratory disorder; inflammatory disorder; neurological disorder;
KW   endocrine disorder; reproductive system disorder; infectious disease;
KW   gastrointestinal disorder; gene therapy; cytostatic; anti inflammatory;
KW   fertility; thrombolytic; anti coagulant; nootropic; neuroprotective; ds.
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PF   17-JAN-2001; 2001WO-US001311.
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PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.

  Query Match             3.5%;  Score 79.4;  DB 4;  Length 24788;
  Best Local Similarity   60.4%;  Pred. No. 7.1e-07;
  Matches  131;  Conservative    0;  Mismatches   86;  Indels    0;  Gaps    0;

Qy        753 CAAGATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTT 812
              || ||  ||||||| ||  ||  |||| | | || || ||||| ||| | |||||||
Db      10320 CAGGAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAG 10261

Qy        813 GCCCTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATT 872
              | ||| || || ||  |           || |||  ||||||    | ||||||||| | |
Db      10260 GGCCTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTATGTC 10201

Qy        873 GTAATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGG 932
              |||||  || ||    ||| |  |  | | ||||||    ||||| || ||   | ||
Db      10200 TGCATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGG 10141

Qy        933 GGGAACAGCTACTTCATGGTGGAGGTGAAATGCAGAG 969
              || |  |||||| |  | |||||  | |||  ||
Db      10140 GGCATTTGCTACTTTTTCATCGAGGTACAGTGCCAAG 10104


RESULT 125
AAC01627
ID   AAC01627 standard; cDNA; 409 BP.
XX
AC   AAC01627;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 1625.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
DR   P-PSDB; AAG01621.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 1; SEQ ID NO 1625; 71pp + Sequence Listing; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. An ORF has been identified within the
CC   sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs
CC   derived from 30 different tissues. EST sequences usually correspond
CC   mainly to the 3' untranslated region (UTR) of the mRNA because they are
CC   often obtained from oligo-dT primed cDNA libraries. Such ESTs are not
CC   well suited for isolating cDNA sequences derived from the 5' ends of
CC   mRNAs and even in those cases where longer cDNA sequences have been
CC   obtained, the full 5' UTR is rarely included. 5' ESTs are derived from
CC   mRNAs with intact 5' ends and can therefore be used to obtain full length
CC   cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic,
CC   gene therapy and chromosome mapping procedures. They are used to obtain
CC   upstream regulatory sequences and to design expression and secretion
CC   vectors
XX
SQ   Sequence 409 BP; 94 A; 97 C; 127 G; 87 T; 0 U; 4 Other;

  Query Match             3.4%;  Score 76.8;  DB 3;  Length 409;
  Best Local Similarity   56.5%;  Pred. No. 7.3e-07;
  Matches  160;  Conservative    2;  Mismatches  115;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||      ||||||||   |   |  |||  ||      | |||||||
Db        133 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 192

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |          |||   ||  ||   || ||||
Db        193 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 246

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       |  |||   ||||||  |  |||||    ||||||  || |
Db        247 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 306

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | :: | |   |
Db        307 GAAAACAAAAGCTCCCTGATGGCTCGNAGATCCCGCTCCCTCCTATTCTGMWCGGCAGGC 366

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCA 595
              ||||   ||| ||   |||    |||||||| | ||||| ||
Db        367 TGGGMTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCA 409


RESULT 126
AAC01626
ID   AAC01626 standard; cDNA; 464 BP.
XX
AC   AAC01626;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein 5' EST, SEQ ID NO: 1624.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping; ss.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
DR   P-PSDB; AAG01620.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 1; SEQ ID NO 1624; 71pp + Sequence Listing; English.
XX
CC   The present sequence is one of a large number of 5' ESTs derived from
CC   mRNAs encoding secreted proteins. An ORF has been identified within the
CC   sequence. The 5' ESTs were prepared from total human RNAs or polyA+ RNAs
CC   derived from 30 different tissues. EST sequences usually correspond
CC   mainly to the 3' untranslated region (UTR) of the mRNA because they are
CC   often obtained from oligo-dT primed cDNA libraries. Such ESTs are not
CC   well suited for isolating cDNA sequences derived from the 5' ends of
CC   mRNAs and even in those cases where longer cDNA sequences have been
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CC   obtained, the full 5' UTR is rarely included. 5' ESTs are derived from
CC   mRNAs with intact 5' ends and can therefore be used to obtain full length
CC   cDNAs and genomic DNAs. 5' ESTs are also used in diagnostic, forensic,
CC   gene therapy and chromosome mapping procedures. They are used to obtain
CC   upstream regulatory sequences and to design expression and secretion
CC   vectors
XX
SQ   Sequence 464 BP; 105 A; 117 C; 138 G; 100 T; 0 U; 4 Other;

  Query Match             3.4%;  Score 76.8;  DB 3;  Length 464;
  Best Local Similarity   56.5%;  Pred. No. 7.6e-07;
  Matches  160;  Conservative    2;  Mismatches  115;  Indels    6;  Gaps    1;

Qy        313 TCTTCCAGTACATTGACCTCCATCAGGATGAATTTGTGCAGACGCTGAAGGAGTGGGTGG 372
              | ||  ||||||| ||     ||||||||   |   | |||  ||     | |||||||
Db        188 TGTTTAAGTACATAGATGAAAATCAGGATCGCTACATTAAGAAACTCGCAAAATGGGTGG 247

Qy        373 CCATCGAGAGCGACTCTGTCCAGCCTGTGCCTCGCTTCAGACAAGAGCTCTTCAGAATGA 432
              | ||| |||| |  ||||    ||| | |        |||   ||  ||   || ||||
Db        248 CTATCCAGAGTGTGTCTGCGTGGCCGGAG------AAGAGAGGCGAAATCAGGAGGATGA 301

Qy        433 TGGCCGTGGCTGCGGACACGCTGCAGCGCCTGGGGGCCCGTGTGGCCTCGGTGGACATGG 492
              |||  || ||||| |       | |||   |||||| |  |||||    |||||| || |
Db        302 TGGAAGTTGCTGCTGCAGATGTTAAGCAGTTGGGGGGCTCTGTGGAACTGGTGGATATCG 361

Qy        493 GTCCTCAGCAGCTGCCCGATGGTCAGAGTCTTCCAATACCTCCCGTCATCCTGGCCGAAC 552
              |    ||  |||| || |||||   |    | ||  | |||||  |  | :: | |   |
Db        362 GAAAACAAAAGCTCCCTGATGGCTCGNAGATCCCGCTCCCTCCTATTCTGMWCGGCAGGC 421

Qy        553 TGGGGAGCGATCCCACGAAAGGCACCGTGTGCTTCTACGGCCA 595
              ||||   ||| ||   |||    ||||||||| | ||||| ||
Db        422 TGGGMTCCGACCCACAGAAGAAGACCGTGTGCATTTACGGGCA 464


RESULT 127
ACN55482/c
ID   ACN55482 standard; cDNA; 515 BP.
XX
AC   ACN55482;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-024-Q6-N6-C7, SEQ:10263.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 10263; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 515 BP; 160 A; 71 C; 74 G; 210 T; 0 U; 0 Other;

  Query Match             3.4%;  Score 75.8;  DB 13;  Length 515;
  Best Local Similarity   76.7%;  Pred. No. 1.3e-06;
  Matches   92;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
              | |  ||| || | ||||  |||||| |||||    || |  ||  | |||      |  |
Db        162 TGTTTTTTCCCCCCCTTTAATTTTATTTTATTTGAGAATAAATTTTTGTCCTTTTTTATC 103

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        102 CCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 43


RESULT 128
AAF11970
ID   AAF11970 standard; cDNA; 650 BP.
XX
AC   AAF11970;
XX
DT   13-MAR-2001  (first entry)
XX
DE   Aspergillus oryzae EST SEQ ID NO:4493.
XX
KW   Multiple gene expression; filamentous fungal cell; EST;
KW   expressed sequence tag; Fusarium venenatum; Aspergillus niger;
KW   Aspergillus oryzae; Trichoderma reesei; identification; recombination;
KW   culture condition; environmental stress; spore morphogenesis;
KW   metabolic pathway engineering; catabolic pathway engineering; ss.
XX
OS   Aspergillus oryzae.
XX
PN   WO200056762-A2.
XX
PD   28-SEP-2000.
XX
PF   22-MAR-2000; 2000WO-US007781.
XX
PR   22-MAR-1999;   99US-00273623.
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XX
PA   (NOVO ) NOVO NORDISK BIOTECH INC.
PA   (NOVO ) NOVO NORDISK AS.
XX
PI   Berka RM,  Rey MW,  Shuster JR,  Kauppinen S,  Clausen IG,  Olsen PB;
XX
DR   WPI; 2000-594572/56.
XX
PT   Monitoring differential expression of genes in filamentous fungal cells
PT   uses fluorescence-labeled nucleic acids isolated from the cells and a
PT   substrate of expressed sequence tags.
XX
PS   Claim 88; Page 1917; 3161pp; English.
XX
CC   The present invention describes a method for monitoring differential
CC   expression of genes in a first filamentous fungal (FF) cell relative to
CC   expression of the same genes in one or more second filamentous fungal
CC   cells. The method uses fluorescence-labeled nucleic acids isolated from
CC   the FF cells and a substrate of expressed sequence tags (EST). The ESTs
CC   are used in the methods for monitoring differential expression of genes
CC   in a first filamentous fungal (FF) cell relative to expression of the
CC   same genes in one or more second filamentous fungal cells. Monitoring the
CC   global expression of genes from FF cells allows the production potential
CC   of the microorganisms to be improved. New genes may be discovered,
CC   possible functions of unknown open reading frames can be identified and
CC   gene copy number variation and stability can be monitored. The expression
CC   of genes can be used to study how FF cells adapt to changes in culture
CC   conditions, environmental stress, spore morphogenesis, recombination,
CC   metabolic or catabolic pathway engineering. Using ESTs provides several
CC   advantages over genomic or random cDNA clones including elimination of
CC   redundancy as one spot on an array equals one gene or open reading frame,
CC   and organisation of the microarrays based on function of the gene
CC   products to facilitate analysis of the results. AAF07478 to AAF11247
CC   represents ESTs from Fusarium venenatum; AAF11248 to AAF11853 represents
CC   ESTs from Aspergillus niger; AAF11854 to AAF14878 represents ESTs from
CC   Aspergillus oryzae; and AAF14879 to AAF15337 represents ESTs from
CC   Trichoderma reesei, which are all specifically claimed in the present
CC   invention
XX
SQ   Sequence 650 BP; 171 A; 142 C; 179 G; 156 T; 0 U; 2 Other;

  Query Match             3.4%;  Score 75.4;  DB 3;  Length 650;
  Best Local Similarity   53.0%;  Pred. No. 1.7e-06;
  Matches  206;  Conservative    0;  Mismatches  178;  Indels    5;  Gaps    2;

Qy        522 CTTCCAATACCTCCCGTCATCCTGGCCGAACTGGGGAGCGATCCCACGAAAGGCACCGTG 581
              |||     |||| || ||  || | ||        || |  |||   |  ||  | ||| |
Db        264 CTTGACCTACCCCCAGTTGTCATCGCTCGGTATGGCAATGATAAAAACAAGCGAACCATA 323

Qy        582 TGCTTCTACGGCCACTTGGACGTGCAGCCTGCTGACCGGGGCGATGGGTGGCTCACGGAC 641
              | |||||||| |  || || ||||| ||      ||  || || ||| |||  ||
Db        324 CTGGTTTACGGCCATTATGATGTCCAGCCAGCATTGAAGGAAGACGGATGGGCCACCGAG 383

Qy        642 CCCTATGTGCTGACGGAGGTAGAC---GGGAAACTTTATGGACGAGGAGCGACCGACAAC 698
              || | |    ||||||  |   ||   || |   | || || || |||   || ||| ||
Db        384 CCTTTTCAATTGACGGTTGACAACCAAGGAAGGATGTACGGCCGTGGAAGTACAGACGAC 443

Qy        699 AAAGGCCCTGTCTTGGCTTGGATCAATGCTGTGAGCGCCTTCAGAGCCCTGGAGCAAGAT 758
              |||||  || |||||||  ||| | || |    |     |||  |||        |     ||
Db        444 AAAGGTCCCGTCTTGGGATGGTTGAACGTGATCGAAGCCCACAGGAAAGCTGGTGTTGAG 503

Qy        759 CTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCCCTG 818
              || || || ||  |     | |  | |||||| ||||| |||  ||||||     |   ||
Db        504 CTGCCAGTCAACCTTCTTTGCTGCTTTGAGGGCATGGANGAGTATGGCTCGAANGGGTTG 563

Qy        819 GAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTAATT 878
                | | ||     ||    | || |  |  | ||    | || |||   | |    ||
Db        564 --AGGAATTTATTCAAGCTGAGAGCAAAGGCTTTTTCAGGATGCGGATGCCGTCTGCATA 621

Qy        879 TCAGATAACCTGTGGATCAGCCAAAGGAA 907
              ||||||||    ||| |  |    |  |||
Db        622 TCAGATAATTATTGGCTTGGAACAGAGAA 650
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RESULT 129
ACN55464/c
ID   ACN55464 standard; cDNA; 540 BP.
XX
AC   ACN55464;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-024-Q6-N6-A3, SEQ:10245.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 10245; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
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```
SQ   Sequence 540 BP; 155 A; 58 C; 103 G; 224 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 75;  DB 13;  Length 540;
  Best Local Similarity   77.6%;  Pred. No. 2e-06;
  Matches   90;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186
              ||||    | | ||  |||| | || || | |||  | ||  | ||| || |   | ||
Db        200 CTTTTTGCCCCCTTGTTTTTTTTTTTTTTTAAAAATTTTTTATTTTCCCCCCCCCCCCCCA 141

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        140 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 85


RESULT 130
ACH94002
ID   ACH94002 standard; DNA; 202 BP.
XX
AC   ACH94002;
XX
DT   29-JUL-2004  (first entry)
XX
DE   Human genome derived single exon probe #27197.
XX
KW   Human; probe; ss; gene expression; single exon probe; microarray;
KW   alternative splicing event; genomic alteration.
XX
OS   Homo sapiens.
XX
PN   US2003194704-A1.
XX
PD   16-OCT-2003.
XX
PF   03-APR-2002; 2002US-00029386.
XX
PR   03-APR-2002; 2002US-00029386.
XX
PA   (PENN/) PENN S G.
PA   (RANK/) RANK D R.
PA   (HANZ/) HANZEL D K.
XX
PI   Penn SG,  Rank DR,  Hanzel DK;
XX
DR   WPI; 2004-119264/12.
XX
PT   New human genome-derived single exon nucleic acid probes useful for human
PT   gene expression analysis, for identifying or characterizing alternative
PT   splicing events, for assessing genomic alterations or as tools for
PT   surveying tissues.
XX
PS   Claim 1; SEQ ID NO 27197; 80pp; English.
XX
CC   The invention relates to a nucleic acid probe for measuring human gene
CC   expression, comprising any of the 27,400 fully defined nucleotide
CC   sequences in the specification, or their complements or fragments, and
CC   encoding at least 8 amino acids of any of the 6888 amino acid sequences
CC   fully defined in the specification. The probe is a single exon probe that
CC   hybridises under high stringency conditions to a nucleic acid molecule
CC   expressed in human cells or tissues. Also included are a spatially-
CC   addressable set of single exon nucleic acid probes for measuring human
CC   gene expression (comprising a plurality of single exon nucleic acid
CC   probes cited above, where each of the plurality of probes is separately
CC   and addressably isolatable or amplifiable from the plurality), a single
CC   exon microarray for measuring human gene expression, a method of
CC   measuring human gene expression, a vector comprising the single exon
CC   probe cited above, an ORF-encoded peptide comprising at least 8
CC   contiguous amino acids of any of the above- mentioned amino acid
CC   sequences (optionally with conservative amino acid substitutions), an
CC   isolated antibody that binds specifically to a peptide cited above,
CC   methods of selling and/or licensing single exon probes or microarrays to
CC   a customer desiring to measure gene expression, a method of providing
CC   human gene expression data by subscription, and a computer-readable
CC   storage medium which contains a database having a plurality of records
CC   (each record including data on the expression of a single exon probe
CC   cited above. The probe, methods and apparatus are useful in gene
CC   expression analysis. The probes may be used as tools for surveying
CC   tissues to detect the presence of expressed messages that contain their
CC   specific exon, or in constructing genome-derived single exon microarrays.
CC   In addition, the probes are used in identifying and characterising
CC   alternative splicing events, in detecting and characterising gross
CC   alterations in the genomic locus that includes their exon, in assessing
CC   smaller genomic alterations, in priming the synthesis of nucleic acids,
CC   or in expressing the ORF-encoded peptide. The present sequence is a human
CC   single exon probe of the invention. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20030194704
XX
SQ   Sequence 202 BP; 47 A; 47 C; 55 G; 53 T; 0 U; 0 Other;

  Query Match             3.3%;  Score 73;  DB 12;  Length 202;
  Best Local Similarity   60.2%;  Pred. No. 4e-06;
  Matches  121;  Conservative    0;  Mismatches   80;  Indels    0;  Gaps    0;

Qy        756 GATCTTCCTGTGAATATCAAATTCATCATTGAGGGGATGGAAGAGGCTGGCTCTGTTGCC 815
              ||  ||||||| ||  ||  |||| | | || || ||||| ||| | ||||||| | |
Db          2 GAGATTCCTGTCAACGTCCGATTCTGCCTCGAAGGCATGGAGGAGTCAGGCTCTGAGGGC 61

Qy        816 CTGGAGGAACTTGTGGAAAAAGAAAAGGACCGATTCTTCTCTGGTGTGGACTACATTGTA 875
              || || || ||  |          || |||  ||||||    | |||||||||  |
Db         62 CTAGACGAGCTGATTTTTGCCCGGAAAGACACATTCTTTAAGGATGTGGACTATGTCTGC 121

Qy        876 ATTTCAGATAACCTGTGGATCAGCCAAAGGAAGCCAGCAATCACTTATGGAACCCGGGGG 935
              ||||| || ||    ||| |  |  | | ||||||    ||||| || ||   | ||||
Db        122 ATTTCTGACAATTACTGGCTGGGAAAGAAGAAGCCCTGCATCACCTACGGCCTCAGGGGC 181

Qy        936 AACAGCTACTTCATGGTGGAG 956
              |   |||||||  |  | |||
Db        182 ATTTGCTACTTTTTCATCGAG 202


RESULT 131
ACD94023/c
ID   ACD94023 standard; cDNA; 216 BP.
XX
AC   ACD94023;
XX
DT   23-SEP-2003  (first entry)
XX
DE   Human colon cancer cell expressed cDNA #2435.
XX
KW   Open reading frame detection; genome sequencing; colon cancer;
KW   breast cancer; population genome analysis; genetic shift; cancer;
KW   antibiotic resistance; antibiotic non-tolerance; congenital disease;
KW   agriculture; food crop genome; resistance gene; retrovirus;
KW   influenza virus; eukaryotic pathogen detection; trypanosome; Plasmodium;
KW   gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2002155438-A1.
XX
PD   24-OCT-2002.
XX
PF   27-SEP-1999;   99US-00406117.
XX
PR   20-NOV-1998;   98US-00196716.
XX
PA   (SIMP/) SIMPSON A J G.
PA   (NETO/) NETO E D.
PA   (BREN/) BRENTANI R R.
XX
PI   Simpson AJG,  Neto ED,  Brentani RR;
XX
DR   WPI; 2003-182626/18.
```

```
XX
PT   Determining open reading frames of genome of an organism e.g. a human
PT   suffering from cancer involves use of single oligonucleotide primer at
PT   low stringency for preparing single-stranded cDNA from mRNA of
PT   individual.
XX
PS   Example 9; Page 369; 959pp; English.
XX
CC   The invention describes a method of determining open reading frames in
CC   the genome of organism, comprising contacting mRNA from cell of organism
CC   with a single oligonucleotide primer (I) at low stringency, preparing
CC   single-stranded cDNA by reverse transcribing mRNA with (I), amplifying
CC   cDNA , sequencing the product, and repeating the contacting, preparing
CC   and amplifying steps with different primers and sequencing resulting
CC   nucleic acids. The method is useful for: determining that a known
CC   nucleotide sequence from a genome of an organism corresponds to a
CC   nucleotide sequence of an open reading frame; for preparing a contig,
CC   nucleic acid molecule from a genome of an organism; and for sequencing
CC   all or part of a genome of an organism. mRNA is obtained from mammalian
CC   or human cell which is associated with a pathological condition e.g. a
CC   colon cancer or breast cancer cell. The method is useful for analyses of
CC   populations of subjects and can be used to carry out genetic analyses of
CC   large or small populations. further, it can be used to study living
CC   systems to determine if, e.g. there have been genetic shifts which render
CC   an individual or population more or less likely to be afflicted with
CC   diseases such as cancer, to determine antibiotic resistance or non-
CC   tolerance, and so forth. The method can also be used in the study of
CC   congenital diseases, and the risk of affliction to a foetus, as well as
CC   the study of whether the conditions are likely to be passed to offspring
CC   through ova or sperm. The analyses for pathological conditions can be
CC   carried out in all animals, plants, birds, fish, etc. Using this method,
CC   in the area of agriculture, for example the genomes of food crops can be
CC   studied to determine if resistance genes are present, defects in plant
CC   genomes can also be studied in this way. Similarly, the method permits
CC   determination of the pathogens which integrate into the genome, such as
CC   retroviruses and other integrating viruses such as influenza virus, have
CC   undergone shifts or mutations, which may require different approaches to
CC   therapy. This method is also applied to eukaryotic pathogens, such as
CC   trypanosomes, different types of Plasmodium, etc. The method essentially
CC   eliminates sequencing of non-coding portions. This sequence represents a
CC   polynucleotide isolated from human colon cancer cell cDNA library
XX
SQ   Sequence 216 BP; 45 A; 62 C; 62 G; 46 T; 0 U; 1 Other;

  Query Match             3.3%;  Score 73;  DB 10;  Length 216;
  Best Local Similarity   59.0%;  Pred. No. 4.1e-06;
  Matches  124;  Conservative    0;  Mismatches   86;  Indels    0;  Gaps    0;

Qy       1137 ATCCATCTAGACCTAGAAGAATACCGGAATAGCAGCCGGGTTGAGAAATTTCTGTTCGAT 1196
             ||| |  | | | |||| || |     ||         |||   |||   |  ||  |
Db        216 ATCGACTTTGGCATAGAGGAGTTTGCCAAGGATGTGGGGGCGCAGATCCTCNTGCACAGC 157

Qy       1197 ACTAAGGAGGAGATTCTAATGCACCTCTGGAGGTACCCATCTCTTTCTATTCATGGGATC 1256
               ||| | || || |  |||||||  ||| ||||||| ||||| ||  | ||||| |||
Db        156 CACAAGAAAGACATCCCCATGCACCGATGGCGGTACCCGTCTCTGTCCCTCCATGGCATC 97

Qy       1257 GAGGGCGCGTTTGATGAGCCTGGAACTAAAACAGTCATACCTGGCCGAGTTATAGGAAAA 1316
             || ||||| ||   || | ||||  | || || || || ||  |    ||  | || ||
Db         96 GAAGGCGCCTTCTCTGGGTCTGGGGCCAAGACCGTGATTCCCAGGAAGGTGGTTGGCAAG 37

Qy       1317 TTTTCAATCCGTCTAGTCCCTCACATGAAT 1346
             || || ||| | || || ||  |||||| |
Db         36 TTCTCCATCAGGCTCGTGCCGAACATGACT 7


RESULT 132
ACN52913/c
ID   ACN52913 standard; cDNA; 411 BP.
XX
AC   ACN52913;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-019-Q1-N6-D10, SEQ:7694.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 7694; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 411 BP; 161 A; 5 C; 69 G; 176 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 72.8;  DB 13;  Length 411;
  Best Local Similarity   73.6%;  Pred. No. 5.5e-06;
  Matches   92;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2118 TCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCA 2177
               ||   |||  ||| || || |||  |||| | |    ||  ||||| ||  | |   ||
Db        208 TCCTTTTTTTTTTTCCCCTTTTTTTTTTTTTTTCCAAAACCAAAATTTTTTTTTTCCCT 149
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Qy       2178 CTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2237
                |   |  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        148 TTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 89

Qy       2238 AAAAA 2242
              |||||
Db         88 AAAAA 84
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RESULT 133
ACN88453/c
ID ACN88453 standard; DNA; 358 BP.
XX
AC ACN88453;
XX
DT 02-DEC-2004 (first entry)
XX
DE Breast cancer related marker, seq id 9603.
XX
KW Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS Homo sapiens.
XX
PN US2003099974-A1.
XX
PD 29-MAY-2003.
XX
PF 18-JUL-2002; 2002US-00198846.
XX
PR 18-JUL-2001; 2001US-0306220P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX
DR WPI; 2003-787014/74.
XX
PT Novel isolated polypeptide associated with breast cancer, useful for
PT detecting presence of polypeptide in sample, as a marker for breast
PT cancer.
XX
PS Disclosure; SEQ ID NO 9603; 36pp; English.
XX
CC The invention relates to an isolated polypeptide (I) associated with
CC breast cancer which is encoded by a nucleic acid molecule comprising a
CC nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC the polypeptide of the invention. The activity of the polypeptide of the
CC invention may be described as cytostatic. The antibody is useful for
CC detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC invention are useful in the detection of breast tumours. (I) is useful as
CC a marker for breast cancer and in breast cancer therapy. Sequences given
CC in records ACN78851-ACN92934 represent nucleic acid markers associated
CC with breast cancer. Note: The sequence listing does not form part of the
CC specification but may be obtained in electronic format from the USPTO web
CC site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ Sequence 358 BP; 99 A; 21 C; 55 G; 147 T; 0 U; 36 Other;

  Query Match   3.2%; Score 72.6; DB 11; Length 358;
  Best Local Similarity   72.5%; Pred. No. 5.8e-06;
  Matches   87; Conservative   0; Mismatches   33; Indels   0; Gaps   0;

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Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
              |||       |   | |||  |||| | || |||| |||||  |   | ||| | |
Db        230 TTTTTNNANCTTTTTTTTTTTTTTTTTTTTAAAAAAAANTTNNNTTTCCCCNAAAAAA 171

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        170 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 111
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RESULT 134
ABX43971/c
ID ABX43971 standard; cDNA; 357 BP.
XX
AC ABX43971;
XX
DT 21-FEB-2003 (first entry)
XX
DE Bovine EST associated with lactation/muscle/fat deposition #9136.
XX
KW Bovine; ss; EST; expressed sequence tag; lactation; LMFD;
KW muscle deposition; fat deposition; genome mapping; gene identification;
KW gene analysis; cattle breeding.
XX
OS Bos Taurus.
XX
PN US2002137139-A1.
XX
PD 26-SEP-2002.
XX
PF 24-SEP-2001; 2001US-00960352.
XX
PR 12-JAN-1999; 99US-0115707P.
PR 11-JAN-2000; 2000US-00480902.
XX
PA (BYAT/) BYATT J C.
PA (MATH/) MATHIALAGAN N.
PA (TAON/) TAO N.
PA (WARR/) WARREN W C.
XX
PI Byatt JC, Mathialagan N, Tao N, Warren WC;
XX
DR WPI; 2003-110599/10.
XX
PT New nucleic acid associated with lactation, and muscle and fat
PT deposition, useful for genome mapping, gene identification and analysis,
PT cattle breeding, or for genetically improving cattle.
XX
PS Claim 2; SEQ ID NO 9136; 245pp; English.
XX
CC The invention relates to a purified nucleic acid molecule associated with
CC lactation or muscle and fat deposition (designated LMFD), derived from
CC cattle, and the LMFD nucleic acid can specifically hybridise to a second
CC nucleic acid molecule comprising any of 15112 nucleotide sequences,
CC appearing as ABX34836-ABX49947, or complements of them. Also included are
CC ; (1) a transformed cell having a nucleic acid comprising an LMFD nucleic
CC acid linked to a promoter and a 3' non- translated sequence that
CC functions in the cell to cause termination of transcription and addition
CC of polyadenylated ribonucleotides to a 3' end of the mRNA molecule; and
CC (2) determining a level or pattern of a molecule in a bovine cell or
CC tissue comprising: (a) incubating a marker nucleic acid (comprising any
CC of the 15112 nucleic acid sequences or its complement or fragment) with a
CC complementary nucleic acid molecule obtained from the bovine cell or
CC tissue, where hybridisation between the marker nucleic acid and the
CC complementary nucleic acid permits the detection of the molecule; and (b)
CC detecting the level or pattern of the complementary nucleic acid, where
CC the detection of the complementary nucleic acid is predictive of the
CC level or pattern of the molecule. The LMFD nucleic acid is used for
CC determining a level or pattern of a molecule in a bovine cell or tissue.
CC It is useful for genome mapping, gene identification and analysis, cattle
CC breeding, preparation of constructs for use in cattle gene expression, or
CC for genetically improving cattle. The present sequence is one of the
CC 15112 bovine LMFD EST (expressed sequence tag) nucleic acids. Note: The
CC present sequence was not shown in the specification but was obtained in
CC electronic format from the USPTO web site:
CC seqdata.uspto.gov/sequence.html?DocID=20020137139
XX
SQ Sequence 357 BP; 60 A; 80 C; 72 G; 145 T; 0 U; 0 Other;

  Query Match   3.2%; Score 72.4; DB 8; Length 357;
  Best Local Similarity   82.8%; Pred. No. 6.4e-06;
  Matches   82; Conservative   0; Mismatches   17; Indels   0; Gaps   0;

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Qy       2144 TTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAA 2203
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            ||||| || | ||||||     | || | |||   ||  | ||||||||||||||||||
Db        173 TTTATTTTTTAAATAAAGGCCATTGTTTTCACAGATGGGTTCCAAAAAAAAAAAAAAAAA 114

Qy       2204 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||
Db        113 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 75
```

RESULT 135
ADL37255/c
ID ADL37255 standard; DNA; 467 BP.
XX
AC ADL37255;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #11145.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 11145; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 467 BP; 110 A; 31 C; 38 G; 198 T; 0 U; 90 Other;

```
  Query Match             3.2%;  Score 72;  DB 5;  Length 467;
  Best Local Similarity   70.6%;  Pred. No. 8.6e-06;
  Matches   84;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              ||  ||||  |   |||  ||| |    |  || ||||| |  |    || |  |    |
Db        196 TTTTTTTAAGANATTTTTTTTTNANAAAAAAAAAAAAAAAANGGGGNNNGCCCCNNCNCCNT 137

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||| ||||||||||||||||||
Db        136 NNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAA 78
```

RESULT 136
ADI72106/c
ID ADI72106 standard; DNA; 467 BP.
XX
AC ADI72106;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #4848.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 4848; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of

CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention.
XX
SQ Sequence 467 BP; 110 A; 31 C; 38 G; 198 T; 0 U; 90 Other;

Query Match 3.2%; Score 72; DB 5; Length 467;
Best Local Similarity 70.6%; Pred. No. 8.6e-06;
Matches 84; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
Db 196 TTTTTTTAAGANATTTTTTTTTNANAAAAAAAAAAAAAAAANGGGGNNNGCCCCNNCNCCNT 137

Qy 2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 136 NNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACAAAAAAAAAAAAAAAAA 78

RESULT 137
ACN52610/c
ID ACN52610 standard; cDNA; 574 BP.
XX
AC ACN52610;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-016-Q1-N6-G6, SEQ:7391.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 7391; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 574 BP; 167 A; 22 C; 206 G; 179 T; 0 U; 0 Other;

Query Match 3.2%; Score 71.4; DB 13; Length 574;
Best Local Similarity 69.6%; Pred. No. 1.2e-05;
Matches 96; Conservative 0; Mismatches 42; Indels 0; Gaps 0;

Qy 2105 TTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATG 2164
Db 190 TTTCCCCCCTTTTTCCCCTTTTTTTTTCCCCTTTTCCCTTTTTTTTAAAAAAAAAAAAAA 131

Qy 2165 TTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2224
Db 130 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 71

Qy 2225 AAAAAAAAAAAAAAAAA 2242
Db 70 AAAAAAAAAAAAAAAAA 53

RESULT 138
ACN51787/c
ID ACN51787 standard; cDNA; 480 BP.
XX
AC ACN51787;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-008-Q1-N6-A12, SEQ:6568.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX

PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 6568; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 480 BP; 78 A; 77 C; 143 G; 181 T; 0 U; 1 Other;

Query Match 3.2%; Score 71; DB 13; Length 480;
Best Local Similarity 69.9%; Pred. No. 1.4e-05;
Matches 95; Conservative 0; Mismatches 41; Indels 0; Gaps 0;

Qy 2107 CCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTT 2166
Db 183 CCCCCCCGGGGCCCCCCCCCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAAAAAATTTT 124

Qy 2167 GGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2226
Db 123 TTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 64

Qy 2227 AAAAAAAAAAAAAAAA 2242
Db 63 AAAAAAAAAAAAAAAA 48

RESULT 139

ACN52339/c
ID ACN52339 standard; cDNA; 593 BP.
XX
AC ACN52339;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-014-Q1-N6-F10, SEQ:7120.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 7120; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 593 BP; 210 A; 34 C; 173 G; 176 T; 0 U; 0 Other;

```
  Query Match             3.2%;  Score 71;  DB 13;  Length 593;
  Best Local Similarity   69.9%;  Pred. No. 1.5e-05;
  Matches   95;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;

Qy       2107 CCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTT 2166
              ||||    |  |    |||  ||||  |  |  |  |||| | || |||| |||| | ||
Db        221 CCATTTTTTTTTTTTTTTTTTTTTAAAAACCCCTTTTTTTTTTTTTTTAAAAAAATTTTT 162

Qy       2167 GGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2226
              | |    |  |   |  ||||||||||||||||||||||||||||||||||||||||||
Db        161 TTTATTTTGCCTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 102

Qy       2227 AAAAAAAAAAAAAAAA 2242
              ||||||||||||||||
Db        101 AAAAAAAAAAAAAAAA 86


RESULT 140
ACN87410/c
ID   ACN87410 standard; DNA; 638 BP.
XX
AC   ACN87410;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Breast cancer related marker, seq id 8560.
XX
KW   Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS   Homo sapiens.
XX
PN   US2003099974-A1.
XX
PD   29-MAY-2003.
XX
PF   18-JUL-2002; 2002US-00198846.
XX
PR   18-JUL-2001; 2001US-0306220P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2003-787014/74.
XX
PT   Novel isolated polypeptide associated with breast cancer, useful for
PT   detecting presence of polypeptide in sample, as a marker for breast
PT   cancer.
XX
PS   Disclosure; SEQ ID NO 8560; 36pp; English.
XX
CC   The invention relates to an isolated polypeptide (I) associated with
CC   breast cancer which is encoded by a nucleic acid molecule comprising a
CC   nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC   the polypeptide of the invention. The activity of the polypeptide of the
CC   invention may be described as cytostatic. The antibody is useful for
CC   detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC   invention are useful in the detection of breast tumours. (I) is useful as
CC   a marker for breast cancer and in breast cancer therapy. Sequences given
CC   in records ACN78851-ACN92934 represent nucleic acid markers associated
CC   with breast cancer. Note: The sequence listing does not form part of the
CC   specification but may be obtained in electronic format from the USPTO web
CC   site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ   Sequence 638 BP; 171 A; 46 C; 82 G; 183 T; 0 U; 156 Other;

  Query Match             3.2%;  Score 71;  DB 11;  Length 638;
  Best Local Similarity   51.3%;  Pred. No. 1.6e-05;
  Matches  116;  Conservative    0;  Mismatches  110;  Indels    0;  Gaps    0;

Qy       2017 TTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAG 2076
              ||||  |     ||  | ||   |||  ||    ||  |      |||  ||| | |
Db        377 TTTTCCCCCCCCNCCCCCCNTTTTTTTTTTTTTTTNNNAAAAAANNNNTTTTTTTTTTTTN 318

Qy       2077 GTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACT 2136
              ||    |  |    | |       |     |    |  |           |  |
Db        317 NNNCTTTTTTTTTTNNNAAAANNNNCCNNNNNTTTTTTTTTTNAAAAAAAAAAAAAAANN 258

Qy       2137 CTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAA 2196
              |||  |||| | || || | |||||| ||  |      |           ||||||||||
Db        257 NTTTTTTTTTTTTTTTTTTAAAAAAATTTTTTTTNGNNNNAAAAAAAAAAAAAAAAAAA 198

Qy       2197 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||
Db        197 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 152


RESULT 141
ABV56384/c
ID   ABV56384 standard; cDNA; 535 BP.
XX
AC   ABV56384;
XX
DT   17-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 56375.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 10880; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 535 BP; 206 A; 116 C; 68 G; 145 T; 0 U; 0 Other;

  Query Match             3.2%;  Score 70.8;  DB 5;  Length 535;
  Best Local Similarity   78.5%;  Pred. No. 1.6e-05;
  Matches   84;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;
```

```
Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
              | |||  |||| | || || | ||||| |||  | |   || |   |    |||||||||
Db        159 TTTTTTTTTTTTTTTTTTTTAAAAAAAGGTTTTTTTTTCCCCCCCCCAAAAAAAAAAAA 100

Qy       2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 53
```

RESULT 142
AAI93507
ID AAI93507 standard; cDNA; 499 BP.
XX
AC AAI93507;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 13567.
XX
KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW tissue growth factor; immunomodulatory; cancer; leukaemia;
KW nervous system disorders; arthritis; inflammation; ss.
XX
OS Homo sapiens.
XX
PN WO200164835-A2.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-US004927.
XX
PR 28-FEB-2000; 2000US-00515126.
PR 18-MAY-2000; 2000US-00577409.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-514838/56.
DR P-PSDB; AAO13576.
XX
PT Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT and treating e.g. leukemia, inflammation and immune disorders.
XX
PS Claim 1; SEQ ID NO 13567; 1399pp + Sequence Listing; English.
XX
CC The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC inflammation. Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 499 BP; 169 A; 125 C; 103 G; 95 T; 0 U; 7 Other;

Query Match 3.1%; Score 70.6; DB 4; Length 499;
Best Local Similarity 68.3%; Pred. No. 1.8e-05;
Matches 97; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

```
Qy       2101 ATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAA 2160
              ||   |||   || | |||||| || |    | |||| | ||| |   |   || |||
Db        153 ATTGGTCCCCACACTCATCGCCCTTACCACGCTACTCCTACCTATCTCCCCTTTTATACT 212

Qy       2161 AATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2220
              |||  |  | |  |  |    . ||||||||||||||||||||||||||||||||||
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Db        213 AATAATCTTATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 272

Qy       2221 AAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||
Db        273 AAAAAAAAAAAAAAAAAAAAA 294
```

RESULT 143
AAI89008
ID AAI89008 standard; cDNA; 428 BP.
XX
AC AAI89008;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 9068.
XX
KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW tissue growth factor; immunomodulatory; cancer; leukaemia;
KW nervous system disorders; arthritis; inflammation; ss.
XX
OS Homo sapiens.
XX
PN WO200164835-A2.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-US004927.
XX
PR 28-FEB-2000; 2000US-00515126.
PR 18-MAY-2000; 2000US-00577409.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-514838/56.
DR P-PSDB; AAO09077.
XX
PT Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT and treating e.g. leukemia, inflammation and immune disorders.
XX
PS Claim 1; SEQ ID NO 9068; 1399pp + Sequence Listing; English.
XX
CC The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC inflammation. Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 428 BP; 202 A; 60 C; 88 G; 68 T; 0 U; 10 Other;

Query Match 3.1%; Score 70.4; DB 4; Length 428;
Best Local Similarity 76.1%; Pred. No. 1.9e-05;
Matches 86; Conservative 0; Mismatches 27; Indels 0; Gaps 0;

```
Qy       2130 TACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAA 2189
              || | ||   ||||  | ||||||||| || | | ||| |  | |  |         |||
Db         38 TAACCCTGGATCCTACTCTCTTATTAAAAAGATTTTTGCTGACAAAAAAAAAAAAAAAAA 97

Qy       2190 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         98 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 150
```

```
RESULT 144
ABV58017
ID   ABV58017 standard; cDNA; 580 BP.
XX
AC   ABV58017;
XX
DT   13-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 58008.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 11146-11147; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 580 BP; 231 A; 129 C; 107 G; 112 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 70.4;  DB 5;  Length 580;
  Best Local Similarity   76.1%;  Pred. No. 2.1e-05;
  Matches   86;  Conservative    0;  Mismatches   27;  Indels    0;  Gaps    0;

Qy       2130 TACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAA 2189
             || | ||   ||||  | |||||||| || | | ||| |  | |  |          |||
Db         65 TAACCCTGGATCCTACTCTCTTATTAAAAAGATTTTTGCTGACAAAAAAAAAAAAAAAAA 124

Qy       2190 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        125 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 177


RESULT 145
AAL35667
ID   AAL35667 standard; cDNA; 1095 BP.
XX
AC   AAL35667;
XX
DT   08-JAN-2002  (first entry)
XX
DE   Human musculoskeletal system related polynucleotide SEQ ID NO 1009.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein;
KW   musculoskeletal system; ss.
XX
OS   Homo sapiens.
XX
PN   WO200155367-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001338.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
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PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-451937/48.
DR P-PSDB; ABB04085.
XX
PT Isolated polypeptide for treating, preventing and/ or prognosing
PT disorders related to the musculoskeletal system including musculoskeletal
PT cancers and also for testing and detection e.g. diagnosis.
XX
PS Claim 1; SEQ ID NO 1009; 781pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (AAL34669-AAL37666) and proteins
CC (ABB03087-ABB04109) associated with the musculoskeletal system useful for
CC preventing, treating or ameliorating medical conditions e.g. by protein
CC or gene therapy. The genes are isolated from a range of human tissues
CC disclosed in the specification. The nucleic acids, proteins, antibodies
CC and (ant)agonists are useful in the diagnosis, treatment and prevention
CC of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC lung, or urogenital; (b) immune disorders e.g. Addison's disease,
CC allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC bacterial, fungal and parasitic infections. Note: The sequence data for
CC this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 1095 BP; 254 A; 291 C; 221 G; 316 T; 0 U; 13 Other;

Query Match 3.1%; Score 70.4; DB 4; Length 1095;
Best Local Similarity 53.1%; Pred. No. 2.5e-05;
Matches 171; Conservative 0; Mismatches 148; Indels 3; Gaps 1;

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Qy       1980 CCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGC 2039
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Db        831 CCTTTGTAGGAGGCGGTGGTCTTCTCCAGAAGAACCCTGAATGCACAACTGTA---CTCA 887

Qy       2040 AATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACAT 2099
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Qy       2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
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Db        948 AACCATGTCTTTAAATATTAGGAATGTGTTTGGTTGGACCTNTCTCCTGCTTCCTGAAAT 1007

Qy       2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
              |||   ||||  | ||||  ·          ||||||||||||||||||||||||||||||
Db       1008 AAACACTGGTGCCAACCAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1067

Qy       2220 AAAAAAAAAAAAAAAAAAAAA 2241
              |||||||||||||||||||||
Db       1068 AAAAAAAAAAAAAAAAAAAAA 1089
```

```
RESULT 146
AAI62755
ID   AAI62755 standard; cDNA; 1095 BP.
XX
AC   AAI62755;
XX
DT   22-OCT-2001  (first entry)
XX
DE   Human cDNA SEQ ID NO 14.
XX
KW   Human; nootropic; neuroprotective; cytostatic; dermatological; virucide;
KW   immunosuppressive; antiinflammatory; anti-HIV; antibacterial; vulnerary;
KW   antiparkinsonian; antisickling; antianaemic; antiarthritic; cancer;
KW   antirheumatic; hepatotropic; cerebroprotective; antiinflammatory;
KW   antiallergic; antidiabetic; antiulcer; anticonvulsant; antifungal;
KW   antiparasitic; cardiant; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; nephrotropic; gene therapy; vaccine; ss.
XX
OS   Homo sapiens.
XX
PN   WO200155449-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001346.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUL-2000; 2000US-0216880P.
PR   14-JUL-2000; 2000US-0218290P.
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PR   08-NOV-2000; 2000US-0246476P.
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XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-476225/51.
DR   P-PSDB; AAM42350.
XX
PT   Novel plasma membrane associated proteins useful for diagnosing,
PT   treating, preventing and/or prognosing disorders related to the proteins,
PT   including cancer, immune response and neuronal disorders.
XX
PS   Claim 1; SEQ ID NO 14; 532pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (AAI62752-AAI62961) and proteins
CC   (AAM42347-AAM42415) useful for preventing, treating or ameliorating
CC   medical conditions e.g. by protein or gene therapy. The genes are
CC   isolated from a range of human tissues disclosed in the specification.
CC   The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC   the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC   ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC   breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC   disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC   anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC   multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC   cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC   ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC   infectious diseases such as viral, bacterial, fungal and parasitic
CC   infections. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1095 BP; 254 A; 291 C; 221 G; 316 T; 0 U; 13 Other;

  Query Match             3.1%;  Score 70.4;  DB 4;  Length 1095;
  Best Local Similarity   53.1%;  Pred. No. 2.5e-05;
  Matches  171;  Conservative    0;  Mismatches  148;  Indels    3;  Gaps    1;

Qy       1920 TCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGT 1979
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Db        771 TCCCTGCCTGCACACCCTCCTGATGCTTSTTCCATCTCCTCCGTTGCTCTTTCTGCATCT 830

Qy       1980 CCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGC 2039
                ||| || |  || |   ||  |             | |||    ||| | ||  |    |
Db        831 CCTTTGTAGGAGGCGGTGGTCTTCTCCAGAAGAACCCTGAATGCACAACTGTA---CTCA 887

Qy       2040 AATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACAT 2099
                ||||   |      |  | || |  | | || |||  |||| | ||  |   |     |
Db        888 GATTTCTGTCTTTAATCCCCTACTCTATTCTCTCTCAGTCCCCTAGGTCATCTTGGTAAG 947

Qy       2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
                || |||  | |  |||  | |   |   |||        |   |    |||  | | |
Db        948 AACCATGTCTTTAAATATTAGGAATGTGTTTGGTTGGACCTNTCTCCTGCTTCCTGAAAT 1007

Qy       2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
                |||   ||||  | ||||          ||||||||||||||||||||||||||||||||
Db       1008 AAACACTGGTGCCAACCAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1067

Qy       2220 AAAAAAAAAAAAAAAAAAAAA 2241
                |||||||||||||||||||||
Db       1068 AAAAAAAAAAAAAAAAAAAAA 1089


RESULT 147
ABX58655
ID   ABX58655 standard; cDNA; 1095 BP.
XX
AC   ABX58655;
XX
DT   26-FEB-2003  (first entry)
XX
DE   cDNA encoding novel human musculoskeletal system antigen #999.
XX
KW   Gene; ss; musculoskeletal system antigen; cancer; metastasis;
KW   re-vascularisation; thrombosis; arteriosclerosis; mineral content;
KW   cardiovascular condition; wound; injury; burn; angiogenesis; ulcer;
KW   post-operative tissue repair; limb regeneration; neuronal growth;
KW   neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW   AIDS-related complex; chondrocyte growth; bone regeneration;
KW   periodontal regeneration; tissue transport; bone graft; skin aging;
KW   keratinocyte growth; hair loss; melanocyte growth; cell proliferation;
KW   cell growth; organ transplant; cell differentiation; body height; weight;
KW   hair colour; eye colour; skin; percentage of adipose tissue;
KW   pigmentation; cosmetic surgery; metabolism; biorhythm; caricadic rhythm;
KW   depression; tendency for violence; pain; reproductive capability;
KW   hormone level; endocrine level; appetite; libido; memory; stress;
KW   storage capability; fat content; lipid content; protein content;
KW   carbohydrate content; vitamin content; cofactor content;
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KW nutritional component.
XX
OS Homo sapiens.
XX
PN US2002147140-A1.
XX
PD 10-OCT-2002.
XX
PF 17-JAN-2001; 2001US-00764877.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 28-JUN-2000; 2000US-0214886P.
PR 07-JUL-2000; 2000US-0216647P.
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PR 25-SEP-2000; 2000US-0234997P.
PR 27-SEP-2000; 2000US-0235834P.
PR 29-SEP-2000; 2000US-0236327P.
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PR 29-SEP-2000; 2000US-0236368P.
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PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 20-OCT-2000; 2000US-0240960P.
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PR 08-DEC-2000; 2000US-0251869P.
XX
PA (ROSE/) ROSEN C A.
PA (RUBE/) RUBEN S M.
PA (BARA/) BARASH S C.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-128199/12.
DR P-PSDB; ABU13379.
XX
PT Isolated nucleic acid molecules encoding musculoskeletal system
PT associated polypeptides, useful for detecting disorders, e.g. cancer.
XX
PS Claim 1; SEQ ID NO 1009; 321pp; English.
XX
CC The invention describes an isolated nucleic acid molecule comprising a
CC sequence encoding musculoskeletal system associated polypeptides useful
CC for detecting disorders, e.g., cancer or cancer metastases, in animals or
CC humans. The nucleic acid: stimulates re-vascularisation of ischaemic
CC tissues associated with conditions such as thrombosis, arteriosclerosis,
CC and other cardiovascular conditions; treats wounds due to injuries,
CC burns, post-operative tissue repair, and ulcers; stimulates angiogenesis
CC and limb regeneration; stimulates neuronal growth; can treat and prevent
CC neuronal damage occurring in certain disorders or neurodegenerative
CC conditions, such as, Alzheimer's disease, Parkinson's disease, and AIDS-
CC related complex; stimulates chondrocyte growth, thus they can be used to
CC enhance bone and periodontal regeneration and aid in tissue transports or
CC bone grafts; prevents skin aging due to sunburn by stimulating
CC keratinocyte growth; prevents hair loss, since FGF family members
CC activate hair-forming cells and promotes melanocyte growth; stimulates
CC growth and differentiation of hematopoietic cells and bone marrow cells
CC when used in combination with other cytokines; maintains organs before
CC transplantation or for supporting cell culture of primary tissues;
CC induces tissue of mesodermal origin to differentiate in early embryos;
CC increases or decreases the differentiation or proliferation of embryonic
CC stem cells, besides, haematopoietic lineage; modulates mammalian
CC characteristics, such as, body height, weight, hair colour, eye colour,
CC skin, percentage of adipose tissue, pigmentation, size, and shape (e.g.,
CC cosmetic surgery); modulates mammalian metabolism; changes mammal's metal
CC state or physical state by influencing biorhythms, caricadic rhythms,
CC depression, tendency for violence, tolerance for pain, reproductive
CC capabilities, hormonal or endocrine levels, appetite, libido, memory, or
CC stress; increases or decreases storage capabilities, fat content, lipid,
CC protein, carbohydrate, vitamins, minerals, cofactors or other nutritional
CC components. This sequence encodes a novel human musculoskeletal system
CC antigen. Note: The sequence data for this patent did not form part of the
CC printed specification, but was obtained in electronic format directly
CC from the US patent office at
CC ftp.seqdata.uspto.gov/sequence.html?DocID=20020147140
XX
SQ Sequence 1095 BP; 254 A; 291 C; 221 G; 316 T; 0 U; 13 Other;

Query Match 3.1%; Score 70.4; DB 8; Length 1095;
Best Local Similarity 53.1%; Pred. No. 2.5e-05;
Matches 171; Conservative 0; Mismatches 148; Indels 3; Gaps 1;

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Db 771 TCCCTGCCTGCACACCCTCCTGATGCTTSTTCCATCTCCTCCGTTGCTCTTTCTGCATCT 830

Qy 1980 CCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGC 2039
Db 831 CCTTTGTAGGAGGCGGTGGTCTTCTCCAGAAGAACCCTGAATGCACAACTGTA---CTCA 887

Qy 2040 AATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACAT 2099
Db 888 GATTTCTGTCTTTAATCCCCTACTCTATTCTCTCTCAGTCCCCTAGGTCATCTTGGTAAG 947

Qy 2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
Db 948 AACCATGTCTTTAAATATTAGGAATGTGTTTGGTTGGACCTNTCTCCTGCTTCCTGAAAT 1007

Qy 2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
Db 1008 AAACACTGGTGCCAACCAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1067

Qy 2220 AAAAAAAAAAAAAAAAAAAAA 2241
Db 1068 AAAAAAAAAAAAAAAAAAAAA 1089

RESULT 148
ADJ28382
ID ADJ28382 standard; DNA; 1095 BP.
XX
AC ADJ28382;

XX
DT 20-MAY-2004 (first entry)
XX
DE Human musculoskeletal system-associated contig DNA - SEQ ID 1009.
XX
KW musculoskeletal system; cytostatic; osteopathic; cancer; osteoporosis;
KW gene therapy; vaccine; human; ds; gene.
XX
OS Homo sapiens.
XX
PN US2004009488-A1.
XX
PD 15-JAN-2004.
XX
PF 13-SEP-2002; 2002US-00242515.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
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PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
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PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
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PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
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PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
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PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
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PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
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PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.

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PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
PR   17-JAN-2001; 2001US-00764877.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2004-090458/09.
DR   P-PSDB; ADJ29405.
XX
PT   New nucleic acid molecule, useful for preparing a medicament for
PT   preventing, treating or ameliorating a medical condition e.g., cancer of
PT   musculoskeletal tissues or osteoporosis.
XX
PS   Claim 4; SEQ ID NO 1009; 289pp; English.
XX
CC   The invention relates to a novel isolated musculoskeletal system-
CC   associated nucleic acid molecule. The nucleic acid of the invention
CC   demonstrates cytostatic and osteopathic activities and may be useful for
CC   preparing a medicament for preventing, treating or ameliorating a medical
CC   condition such as cancer of the musculoskeletal tissues or osteoporosis,
CC   possibly via gene therapy or vaccine production. The current sequence is
CC   that of the human musculoskeletal system-associated contig DNA of the
CC   invention. The current sequence is not shown within the specification per
CC   se but is available on the USPTO web-site
CC   http:seqdata.uspto.gov/sequence.html?DocID=20040009488.
XX
SQ   Sequence 1095 BP; 254 A; 291 C; 221 G; 316 T; 0 U; 13 Other;

  Query Match             3.1%;  Score 70.4;  DB 12;  Length 1095;
  Best Local Similarity   53.1%;  Pred. No. 2.5e-05;
  Matches  171;  Conservative    0;  Mismatches  148;  Indels    3;  Gaps    1;

Qy       1920 TCCCCCACTGCACACCTTCCTCAAGTCATAGCTGCTTGCAGCAACTTGATTTCCCCAAGT 1979
             ||||   ||||||||| |||| | |      |    | |  |       ||||  ||  |
Db        771 TCCCTGCCTGCACACCCTCCTGATGCTTSTTCCATCTCCTCCGTTGCTCTTTCTGCATCT 830

Qy       1980 CCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGC 2039
             ||| || |  || |   ||  |            | |||    ||| | ||  |    |
Db        831 CCTTTGTAGGAGGCGGTGGTCTTCTCCAGAAGAACCCTGAATGCACAACTGTA---CTCA 887

Qy       2040 AATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACAT 2099
              ||||   |    |  | || |  | | || |||  |||| | ||  |   |     |
Db        888 GATTTCTGTCTTTAATCCCCTACTCTATTCTCTCTCAGTCCCCTAGGTCATCTTGGTAAG 947

Qy       2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
             || |||  | |  |||  | |   |  |||        |   |    |||  | | |
Db        948 AACCATGTCTTTAAATATTAGGAATGTGTTTGGTTGGACCTNTCTCCTGCTTCCTGAAAT 1007

Qy       2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
             |||   ||||  | ||||          ||||||||||||||||||||||||||||||||
Db       1008 AAACACTGGTGCCAACCAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1067

Qy       2220 AAAAAAAAAAAAAAAAAAAAA 2241
              |||||||||||||||||||||
Db       1068 AAAAAAAAAAAAAAAAAAAAA 1089


RESULT 149
ABT22887/c
ID   ABT22887 standard; DNA; 317 BP.
XX
AC   ABT22887;
XX
DT   16-APR-2003  (first entry)
XX
DE   Breast cancer marker gene SEQ ID No 1260.
XX
KW   Cytostatic; vaccine; breast cancer marker gene; breast mass; immunogen;
KW   chemotherapy; tumour burden; bait protein; two-hybrid; three-hybrid;
KW   surrogate marker gene; pharmacodynamic marker gene; transgenic animal;
KW   human; ds.
XX
OS   Homo sapiens.
XX
PN   WO200285298-A2.
XX
PD   31-OCT-2002.
XX
PF   19-APR-2002; 2002WO-US012612.
XX
PR   20-APR-2001; 2001US-0285163P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lillie J,  Palermo A,  Wang Y,  Steinmann K,  Elias J,  Mertens M;
XX
DR   WPI; 2003-093053/08.
XX
PT   Novel isolated polypeptide encoded by breast cancer marker gene, useful
PT   for diagnosing, staging, monitoring, prognosing and treating diseases
PT   associated with breast cancer.
XX
PS   Disclosure; Page 261; 725pp; English.
XX
CC   The invention relates to an isolated polypeptide encoded by a breast
CC   cancer marker gene comprising any of 1417 21-805 nucleotide sequences,
CC   given in the specification. The methods of the invention are useful for
CC   diagnosing patients having an identified breast mass or symptoms
CC   associated with breast cancer, to diagnose breast cancer or its
CC   precursors, and for monitoring the efficacy of treatment of a breast
CC   cancer patient (e.g. efficacy of chemotherapy). The methods are also
CC   useful for evaluating a patient before, after or during therapy, to
CC   evaluate the reduction in a tumour burden. The breast cancer marker gene
CC   proteins are useful as immunogens for raising antibodies, by immunising a
CC   mammal with a breast cancer marker protein. The marker proteins are
CC   useful as bait proteins in a two-hybrid or three-hybrid assay, to
CC   identify other proteins which bind to or interact with the marker
CC   proteins. The breast cancer marker genes are useful as surrogate marker
CC   genes for one or more disorders, disease states or conditions leading to
CC   disease states, in particular, breast cancers. The breast cancer marker
CC   genes are useful as pharmacodynamic marker genes. An antibody which
CC   selectively binds to a protein of a breast cancer marker gene is useful
CC   for treating cancers, particularly breast cancers. The host cell of the
CC   invention is useful for producing non-human transgenic animals. This
CC   polynucleotide sequence represents one of the breast cancer marker genes
CC   of the invention
XX
SQ   Sequence 317 BP; 73 A; 18 C; 40 G; 112 T; 0 U; 74 Other;

  Query Match             3.1%;  Score 70.2;  DB 10;  Length 317;
  Best Local Similarity   52.2%;  Pred. No. 1.9e-05;
  Matches   93;  Conservative    0;  Mismatches   85;  Indels    0;  Gaps    0;

Qy       2065 TTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTT 2124
              |||  ||| |          |      | | |   |  |     ||       ||  |
Db        195 TTTTTTTTTTNNNNNNGNNNTTNAANNNNAAANANTTTTNTNNNNCCCCCCCNNTGCNAT 136

Qy       2125 TGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTC 2184
                    |       |||  |||| | || ||   ||||   ||
Db        135 NNNAAAAAANNNNTTTTTTTTTTTTTTTTTTTNNAAAANNNTTTNNNNNNNNNNAAAAAAA 76

Qy       2185 CCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         75 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 18


RESULT 150
AAI83619
ID   AAI83619 standard; cDNA; 408 BP.
XX
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```
AC   AAI83619;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 3679.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO03688.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 1; SEQ ID NO 3679; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 408 BP; 201 A; 33 C; 57 G; 103 T; 0 U; 14 Other;

  Query Match             3.1%;  Score 70.2;  DB 4;  Length 408;
  Best Local Similarity   60.3%;  Pred. No. 2e-05;
  Matches  114;  Conservative    0;  Mismatches   75;  Indels    0;  Gaps    0;

Qy       2054 AATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCA 2113
             ||  ||    ||| |   | ||   ||| | | | |  | | | || ||   ||  | |
Db        107 AAAAACATGTGTTAGAGGTTTATTACCTTAGGAGATTTTTAAATATCATTTATCTGTTAA 166

Qy       2114 ATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCC 2173
             ||       ||   |    || | |   | ||| ||   |||||||  || |   | | |
Db        167 ATTTAGTTGTTGCATCAGACATTTTGCTCATTTTTCCCTTTAATAATTATATCTTTATAC 226

Qy       2174 ACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2233
                 |  ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        227 CANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 286

Qy       2234 AAAAAAAAA 2242
             |||||||||
Db        287 AAAAAAAAA 295


RESULT 151
ACN51998/c
ID   ACN51998 standard; cDNA; 464 BP.
XX
AC   ACN51998;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-010-Q1-N6-E3, SEQ:6779.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 6779; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 464 BP; 222 A; 5 C; 106 G; 131 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 70.2;  DB 13;  Length 464;
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  Best Local Similarity   72.6%;  Pred. No. 2.1e-05;
  Matches   90;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy       2119 CGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCAC 2178
              | | |||  |||      | |||  |||| | || ||  |      | ||  | |   || |
Db        171 CCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCCCC 112

Qy       2179 TGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2238
                | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        111 CCCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 52

Qy       2239 AAAA 2242
                ||||
Db         51 AAAA 48


RESULT 152
ACN60993/c
ID   ACN60993 standard; cDNA; 594 BP.
XX
AC   ACN60993;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-030-Q6-N6-A8, SEQ:15774.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 15774; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 594 BP; 275 A; 38 C; 173 G; 108 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 70.2;  DB 13;  Length 594;
  Best Local Similarity   55.9%;  Pred. No. 2.3e-05;
  Matches  132;  Conservative    0;  Mismatches  104;  Indels    0;  Gaps    0;

Qy       2007 CCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTT 2066
              ||  ||  | ||||     | || ||     ||     |||  ||     |  |  | ||  ||
Db        256 CCCCCCCCCTTTTTTTTTTCTCCCCTTTTTTTTTTTTTTTTTTTTTTTTTCCCCCCTTT 197

Qy       2067 TGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTG 2126
              |  | | |   |  ||    ||  | |   | | |   |   |  |    |||
Db        196 TTTTCTTTTTTTTTCCCCCCCTTTTCCCACTTTTTTCTTTCCTCCTTTTTTTTTTT 137

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186
                |||  | |  |||  |||| | |||  || ||||||  |    |  |  | |   |
Db        136 TTTTTTCCCATTTTTTTTTTTTTTAAAAAAAAAATTATTAATTTAAAAAATTTATAAA 77

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||| ||||||||||| ||||
Db         76 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAGAAAAAAAAAAAGAAAA 21


RESULT 153
ACN50609/c
ID   ACN50609 standard; cDNA; 616 BP.
XX
AC   ACN50609;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton mature seed EST Clone ID: LIB3827-002-Q1-N6-D5, SEQ:5390.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW   variety Coker 312 Boswell 96 Field; library LIB3827; molecular tag;
KW   molecular marker; genetic mapping; molecular mapping; seed germination;
KW   plant growth; plant quality; plant yield; plant breeding;
KW   tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
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PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 5390; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Coker 312 Boswell 96 Field mature seed cDNA library
CC   (LIB3827). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from the US patent office at
CC   seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 616 BP; 173 A; 84 C; 88 G; 271 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 70.2;  DB 13;  Length 616;
  Best Local Similarity   72.6%;  Pred. No. 2.3e-05;
  Matches   90;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy       2119 CGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCAC 2178
             | || ||  |||   || |   |||||| | || ||  |        ||  | | | |||
Db        215 CCCCCTTTTTTTTTTACCCCCCCCTTTTTTTTTTTTTTTGGGCCCTTTTTTTTTCCCCAA 156

Qy       2179 TGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2238
              | ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        155 AAACCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 96

Qy       2239 AAAA 2242
              ||||
Db          95 AAAA 92


RESULT 154
AAA16633
ID   AAA16633 standard; cDNA; 1527 BP.
XX
AC   AAA16633;
XX
DT   16-JUN-2000  (first entry)
XX
DE   Human secreted protein clone py35_1 nucleotide sequence SEQ ID NO:31.
XX
KW   Human; secreted protein; immunestimulant; immunesuppressant; virucide;
KW   antibacterial; antifungal; cytostatic; antiinflammatory; dermatological;
KW   antidiabetic; antiasthmatic; antiarthritic; antirheumatic; protozoacide;
KW   antithyroid; immune deficiency; severe combined immunedeficiency; SCID;
KW   infection; HIV; hepatitis; malaria; autoimmune disorder; systemic lupus;
KW   connective tissue disease; multiple sclerosis; erythematosis;
KW   rheumatoid arthritis; autoimmune pulmonary inflammation; asthma;
KW   Guillain-Barre syndrome; autoimmune thyroiditis; myasthenia gravis;
KW   insulin dependent diabetes mellitus; graft-versus-host-disease;
KW   autoimmune inflammatory eye disease; allergy; ss.
XX
OS   Homo sapiens.
XX
PN   WO200009552-A1.
XX
PD   24-FEB-2000.
XX
PF   13-AUG-1999;   99WO-US018298.
XX
PR   14-AUG-1998;   98US-0096622P.
PR   17-AUG-1998;   98US-0096815P.
PR   04-SEP-1998;   98US-0099229P.
PR   23-OCT-1998;   98US-0105368P.
PR   08-JAN-1999;   99US-0115234P.
PR   12-FEB-1999;   99US-0119931P.
PR   18-FEB-1999;   99US-0120575P.
PR   30-APR-1999;   99US-0132020P.
PR   11-AUG-1999;   99US-0148424P.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Agostino MJ,  Steininger RJ,  Spaulding V;
PI   Wong GG,  Clark HF,  Fechtel K;
XX
DR   WPI; 2000-205979/18.
DR   P-PSDB; AAY94913.
XX
PT   New polynucleotides encoding secreted proteins, which may have e.g.
PT   nutritional, chemokine, immune stimulating or suppressing, hematopoiesis
PT   regulating, tissue growth, activin/inhibin antiinflammatory or tumor
PT   inhibition activity.
XX
PS   Claim 40; Page 501-502; 641pp; English.
XX
CC   AAA16618 to AAA16697 encode the human secreted proteins given in AAY94898
CC   to AAY94980, isolated from human adult brain, adult thyroid, adult
CC   retina, foetal carcinoma, adult blood, adult neural, foetal kidney, adult
CC   placenta, adult testis, whole embryo, adult cartilage, kidney, foetal
CC   brain, adult thymus, foetal placenta, adult uterus, adult tumour, and
CC   adult bladder, cDNA libraries. The polynucleotides and proteins are
CC   predicted to have biological activities which would make them suitable
CC   for treating, preventing or ameliorating medical conditions in humans and
CC   animals. The polynucleotides can be used as markers for tissues in which
CC   the protein is preferentially expressed, as molecular weight markers on
CC   Southern gels, and as chromosome markers or tags to identify chromosomes
CC   or to map gene positions. The proteins can be used in the treatment of
CC   immune deficiencies and disorders, such as severe combined
CC   immunedeficiency (SCID), as well as viral, bacterial, fungal and other
CC   infections. These infections include human immunodeficiency virus (HIV),
CC   hepatitis, herpesviruses, mycobacteria, Leismania spp., malaria and
CC   candidiasis. The proteins can be used to treat autoimmune disorders such
CC   as connective tissue disease, multiple sclerosis, systemic lupus
CC   erythematosis, rheumatoid arthritis, autoimmune pulmonary inflammation,
CC   Guillain-Barre syndrome, autoimmune thyroiditis, insulin dependent
CC   diabetes mellitus, myasthenia gravis, graft-versus-host-disease and
CC   autoimmune inflammatory eye disease. The proteins can also be used to
CC   treat allergic conditions, such asthma. AAA16698 to AAA16774 represent
CC   probes for the human secreted proteins from the present invention
XX
SQ   Sequence 1527 BP; 403 A; 418 C; 386 G; 320 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 70.2;  DB 3;  Length 1527;
  Best Local Similarity   65.4%;  Pred. No. 3.1e-05;
  Matches  102;  Conservative    0;  Mismatches   54;  Indels    0;  Gaps    0;

Qy       2087 GCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTT 2146
              |||| |   | |    |   ||| | |    | | |   ||||| | |||   | || |
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Db       1333 GCTCCTTTGAGAACCCCTCCCCACCTACCCCTTCCTTCCTCTTTATCTCTCCCACATTGT 1392

Qy       2147 ATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAA 2206

Db       1393 CTTGCTTAAATATAGAACTTGGTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1452

Qy       2207 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242

Db       1453 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1488
```

RESULT 155
AAA61288
ID AAA61288 standard; DNA; 1580 BP.
XX
AC AAA61288;
XX
DT 18-OCT-2000 (first entry)
XX
DE Human secreted protein gene 29 clone HWBDI30.
XX
KW Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW diagnosis; tissue; cancer; tumour; AIDS; autoimmune disorder; allergy;
KW cardiovascular; viral; bacterial; fungal infection; immunosuppressive;
KW ds.
XX
OS Homo sapiens.
XX
PN WO200029422-A1.
XX
PD 25-MAY-2000.
XX
PF 09-NOV-1999; 99WO-US026409.
XX
PR 12-NOV-1998; 98US-0108207P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ni J, Ruben SM, Rosen CA, Ebner R, Florence KA, Young PE;
PI Birse CE, Carter KC, Komatsoulis G;
XX
DR WPI; 2000-387729/33.
XX
PT Novel human secreted proteins useful for diagnosing, preventing, treating
PT and ameliorating a medical condition e.g. cardiovascular disease.
XX
PS Claim 1; Page 247; 295pp; English.
XX
CC The present sequence represents a nucleic acid molecule which encodes a
CC secreted human protein. The gene number and the clone it was derived from
CC are given in the descriptor line. The invention relates to 31 novel genes
CC and their fragments (nucleic acid sequences: AAA61260-A61293; amino acid
CC sequences AAB12301-B12371) which are useful for preventing, treating or
CC ameliorating medical conditions e.g. by protein or gene therapy. Also
CC pathological conditions can be diagnosed by determining the amount of the
CC new polypeptides in a sample or by determining the presence of mutations
CC in the new polynucleotides. Specific uses are described for each of the
CC 31 polynucleotides, based on which tissues they are most highly expressed
CC in and include products for the diagnosis or treatment of cancer,
CC tumours, AIDS, autoimmune disorders, allergy, cardiovascular disorders,
CC viral, bacterial and fungal infection. The genes are used to generate
CC fusion proteins by linking to the gene a human immunoglobulin portion
CC (AAA61251) for increasing stability of the fused protein as compared to
CC the secreted protein only
XX
SQ Sequence 1580 BP; 499 A; 251 C; 295 G; 535 T; 0 U; 0 Other;

```
  Query Match             3.1%;  Score 70.2;  DB 3;  Length 1580;
  Best Local Similarity   75.0%;  Pred. No. 3.1e-05;
  Matches   87;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186

Db       1437 CTTTGTCAATTTCCCATTTTATTTTTTTAAATAAATATATGATCTAAAAGCCAAAAAAAA 1496

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242

Db       1497 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1552
```

RESULT 156
ABV04355/c
ID ABV04355 standard; cDNA; 381 BP.
XX
AC ABV04355;
XX
DT 13-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 4346.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 755-756; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 381 BP; 85 A; 48 C; 43 G; 130 T; 0 U; 75 Other;

```
  Query Match             3.1%;  Score 70;  DB 5;  Length 381;
  Best Local Similarity   46.5%;  Pred. No. 2.2e-05;
  Matches  112;  Conservative    0;  Mismatches  129;  Indels    0;  Gaps    0;

Qy       2002 GGATTCCTTCCAACCTTTTAGCATATCTCCAACCTTGCAATTTGATTGGCATAATCACTC 2061

Db        301 GGGNTTTTTTTTAAATTTNGNCTTTTTGGNNGGTTTNNTTTTTTTTGGGGGGNAAAAGNCC 242

Qy       2062 CGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGC 2121

Db        241 CNGNTTTTTTTNNNNNNTANAAANNTTTTTTTTNCNANNNTTTTTTTTTNTNCCNNCNNNNNC 182
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Qy       2122 CTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGN 2181
             ||| || |     |          || | | |    |          | | |  | |
Db        181 NTTTTTTTAAATGNNCCCNTTNNCCNTCCCANTTNNANNNNNNCCNNNCCCNNCNNCNAA 122

Qy       2182 CTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2241
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        121 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 62

Qy       2242 A 2242
              |
Db         61 A 61
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RESULT 157
AAI80552
ID AAI80552 standard; cDNA; 448 BP.
XX
AC AAI80552;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 612.
XX
KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW tissue growth factor; immunomodulatory; cancer; leukaemia;
KW nervous system disorders; arthritis; inflammation; ss.
XX
OS Homo sapiens.
XX
PN WO200164835-A2.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-US004927.
XX
PR 28-FEB-2000; 2000US-00515126.
PR 18-MAY-2000; 2000US-00577409.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-514838/56.
DR P-PSDB; AAO00621.
XX
PT Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT and treating e.g. leukemia, inflammation and immune disorders.
XX
PS Claim 1; SEQ ID NO 612; 1399pp + Sequence Listing; English.
XX
CC The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC inflammation. Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 448 BP; 214 A; 31 C; 146 G; 52 T; 0 U; 5 Other;

Query Match 3.1%; Score 70; DB 4; Length 448;
Best Local Similarity 71.7%; Pred. No. 2.3e-05;
Matches 91; Conservative 0; Mismatches 36; Indels 0; Gaps 0;

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Qy       2116 GATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCAC 2175
              |||  |   ||  ||   || | | |   ||||  ||||||||||||      | || ||
Db         12 GATTGAGATTTTTTGCTCAATATCACTAGTTATACTATTAATAAAAACACAATTTTCTAC 71

Qy       2176 CACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2235
              |          ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         72 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 131

Qy       2236 AAAAAAA 2242
              |||||||
Db        132 AAAAAAA 138
```

RESULT 158
ADL41653/c
ID ADL41653 standard; DNA; 425 BP.
XX
AC ADL41653;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #15543.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 15543; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of

CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 425 BP; 103 A; 64 C; 96 G; 162 T; 0 U; 0 Other;

Query Match 3.1%; Score 69.8; DB 5; Length 425;
Best Local Similarity 73.0%; Pred. No. 2.5e-05;
Matches 89; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 220 CCTTGGCCCCCCCCCCCTTTTTTTTTTCCCCTTTTAAAAGAGAATTTTCCCCCCCCAA 161

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 160 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 101

Qy 2241 AA 2242
Db 100 AA 99

RESULT 159
ADI72087/c
ID ADI72087 standard; DNA; 491 BP.
XX
AC ADI72087;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #4829.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 4829; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 491 BP; 119 A; 56 C; 73 G; 163 T; 0 U; 80 Other;

Query Match 3.1%; Score 69.8; DB 5; Length 491;
Best Local Similarity 70.5%; Pred. No. 2.6e-05;
Matches 86; Conservative 0; Mismatches 36; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 169 CANTNTNTTTTTTTTTTTTTTTTTTTTTTTTTNNAAAAAANTTTTTTTTNCCCCCNAAA 110

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 109 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 50

Qy 2241 AA 2242
Db 49 AA 48

RESULT 160
ADL37236/c
ID ADL37236 standard; DNA; 491 BP.
XX
AC ADL37236;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #11126.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.

```
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 11126; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 491 BP; 119 A; 56 C; 73 G; 163 T; 0 U; 80 Other;

  Query Match             3.1%;  Score 69.8;  DB 5;  Length 491;
  Best Local Similarity   70.5%;  Pred. No. 2.6e-05;
  Matches   86;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             |  |   |||      | |||  |||| | || |   | |||| | ||   |   || ||
Db        169 CANTNTNTTTTTTTTTTTTTTTTTTTTTTTTTTNNAAAAAANTTTTTTTNCCCCCNAAA 110

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        109 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 50

Qy       2241 AA 2242
                ||
Db          49 AA 48


RESULT 161
ACN57165/c
ID   ACN57165 standard; cDNA; 541 BP.
XX
AC   ACN57165;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-014-Q6-N6-G1, SEQ:11946.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 11946; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 541 BP; 179 A; 80 C; 79 G; 203 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 69.8;  DB 13;  Length 541;
  Best Local Similarity   60.8%;  Pred. No. 2.7e-05;
  Matches  113;  Conservative    0;  Mismatches   73;  Indels    0;  Gaps    0;

Qy       2057 CACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATG 2116
```

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Db        245 CCCTTTGTTTTTTTTTTTTTTTTTTAGAGGGGGGGGTTTCAATTATTTTTTTCATTCCCCT 186

Qy       2117 ATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACC 2176

Db        185 TTGGCCTTGAAAAACCCCCTTTTTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAA 126

Qy       2177 ACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2236

Db        125 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 66

Qy       2237 AAAAAA 2242

Db          65 AAAAAA 60
```

RESULT 162
ACN48235/c
ID ACN48235 standard; cDNA; 560 BP.
XX
AC ACN48235;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton primed seed EST Clone ID: LIB3825-021-Q1-N6-B5, SEQ:3016.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW variety DP50B; library LIB3825; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 3016; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety DP50B primed seed cDNA library (LIB3825). The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from the US patent office at
CC seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 560 BP; 255 A; 45 C; 71 G; 189 T; 0 U; 0 Other;

Query Match 3.1%; Score 69.8; DB 13; Length 560;
Best Local Similarity 70.8%; Pred. No. 2.8e-05;
Matches 92; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

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Qy       2113 AATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTC 2172

Db        212 AAAAAACCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCACAATTTTTTTTTTTC 153

Qy       2173 CACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2232

Db        152 CCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 93

Qy       2233 AAAAAAAAAA 2242

Db          92 AAAAAAAAAA 83
```

RESULT 163
AAC59834
ID AAC59834 standard; DNA; 1792 BP.
XX
AC AAC59834;
XX
DT 26-JAN-2001 (first entry)
XX
DE Human secreted protein encoding DNA clone vq19 1.
XX
KW Secreted protein; human; autoimmune disorder; multiple sclerosis; ulcer;
KW systemic lupus erythematosus; rheumatoid arthritis; anaemia; stroke;
KW haematopoiesis regulation; tissue regrowth; wound healing; haemophilia;
KW Alzheimer's disease; Parkinson's disease; Shy-drager syndrome; cancer;
KW contraceptive; infection; growth inhibition; hyperproliferative disorder;
KW psoriasis; ds.
XX
OS Homo sapiens.
XX
PN WO200055375-A1.
XX
PD 21-SEP-2000.
XX
PF 17-MAR-2000; 2000WO-US007285.
XX
PR 17-MAR-1999; 99US-0124808P.
PR 17-MAR-1999; 99US-0124916P.
PR 17-AUG-1999; 99US-0149639P.
PR 01-OCT-1999; 99US-0157247P.
PR 29-NOV-1999; 99US-0167824P.
PR 15-FEB-2000; 2000US-0182711P.
XX
PA (ALPH-) ALPHAGENE INC.
XX
PI Valenzuela D, Yuan O, Hoffman H, Hall J, Rapiejko P;
XX
DR WPI; 2000-638211/61.
DR P-PSDB; AAB34733.
XX

```
PT   Novel proteins and polypeptides useful for the treatment of e.g multiple
PT   sclerosis, systemic lupus erythmatosus, rheumatoid arthritis, cancer,
PT   Alzheimer's disease, Parkinson's disease, stroke, anemia and ulcers.
XX
PS   Claim 102; Page 446-447; 493pp; English.
XX
CC   This invention relates to 59 human secreted proteins and the nucleotide
CC   sequences encoding them. Sequences AAC59788-C59846 and AAB34687-B34745
CC   represent the proteins and their encoding nucleotide sequences, and
CC   sequences AAB34746-B34771 represent fragments of the proteins. Probes for
CC   the DNA sequences are represented by sequences AAC59847-C59596. The
CC   proteins exhibit neuroprotective, dermatological, immunosuppressive,
CC   antiinflammatory, antianaemic, nootropic, antiparkinsonian,
CC   cerebroprotective, haemostatic, vulnerary, cytostatic, antipsoriatic,
CC   antibacterial, virucide, and fungicide activity. The proteins and
CC   nucleotide sequences are useful as nutritional sources or supplements and
CC   in research. The proteins are useful for treating immune deficiency and
CC   disorders, which may be genetic or resulting from infections, autoimmune
CC   disorders such as multiple sclerosis, systemic lupus erythmatosus,
CC   rheumatoid arthritis, and for treating myeloid or lymphoid cell
CC   deficiencies such as anaemias by regulating haematopoiesis. The proteins
CC   are also useful in compositions for bone, cartilage, tendon, ligament
CC   and/or nerve tissue growth or regeneration, for wound healing, tissue
CC   repair and replacement and in the treatment of wounds, incisions and
CC   ulcers. Other uses include in the treatment of central and peripheral
CC   nervous system and neuropathies such as Alzheimer's and Parkinson's
CC   diseases and Shy-Drager syndrome, and mechanical and traumatic disorders,
CC   such as spinal cord disorders, head trauma and stroke. The proteins may
CC   also be used as a contraceptive, and for treating coagulation disorders
CC   such as haemophilias. The protein and nucleotide sequences with cadherin
CC   activity are useful for treating cancer. Other uses for the protein
CC   include for inhibiting the growth, infection or function of, or killing,
CC   infectious agents such as bacteria, virus, fungi and other parasites, for
CC   effecting bodily characteristics such as height, weight, hair colour,
CC   effecting biorhythms or cardiac cycles or rhythms, effecting metabolism,
CC   catabolism, anabolism, processing, utilization, storage or elimination of
CC   dietary fat, lipid, protein, carbohydrate, vitamins, minerals, cofactors,
CC   effecting behavioural characteristics, providing analgesic effects and
CC   for treating hyperproliferative disorders such as psoriasis
XX
SQ   Sequence 1792 BP; 417 A; 507 C; 387 G; 481 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 69.8;  DB 3;  Length 1792;
  Best Local Similarity   81.6%;  Pred. No. 4e-05;
  Matches   80;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy       2145 TTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAA 2204
             || | |||| | ||||| | | | |||       |  |||| ||||||||||||||||||
Db       1691 TTTTATTATCATTAAAACTCTAGTTCTTGTTTTGTCTCTCCGAAAAAAAAAAAAAAAAAA 1750

Qy       2205 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||
Db       1751 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1788


RESULT 164
AAL14832/c
ID   AAL14832 standard; cDNA; 287 BP.
XX
AC   AAL14832;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 7289.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US000798.
XX
PR   14-JAN-2000; 2000US-0176077P.
PR   14-MAR-2000; 2000US-0189167P.
PR   24-MAR-2000; 2000US-0192099P.
PR   29-MAR-2000; 2000US-0193480P.
PR   15-MAY-2000; 2000US-0205230P.
PR   09-JUN-2000; 2000US-0211315P.
PR   25-JUL-2000; 2000US-0220534P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer.
XX
PS   Claim 1; Page 1315; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity
XX
SQ   Sequence 287 BP; 84 A; 25 C; 12 G; 127 T; 0 U; 39 Other;

  Query Match             3.1%;  Score 69.4;  DB 4;  Length 287;
  Best Local Similarity   53.1%;  Pred. No. 2.7e-05;
  Matches  103;  Conservative    0;  Mismatches   91;  Indels    0;  Gaps    0;

Qy       2049 GGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCC 2108
             |||      |  |    |||   ||      |  |   | | | | |    |  ||  ||
Db        249 GGCCNNNCCNATTTTTTTTTNNTTNNNTTTTTTTTGGGGNTNGGGGNNNANNATTTTTTT 190

Qy       2109 ATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGG 2168
              |   |  ||   |      | |||  |  | |      || ||||  | |
Db        189 TTTTTTTTTTCCNAATNNTNNNNGGNTTTTTTTTTNNTTTNCCNNAAAAAAAAGGGNTTT 130

Qy       2169 TCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2228
              | |   ||  |       ||||||||||||||||||||||||||||||||||||||||||
Db        129 TTTTTNCCNTTNGGGNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 70

Qy       2229 AAAAAAAAAAAAAA 2242
              ||||||||||||||
Db         69 AAAAAAAAAAAAAA 56


RESULT 165
ACN84857/c
ID   ACN84857 standard; DNA; 421 BP.
XX
AC   ACN84857;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Breast cancer related marker, seq id 6007.
XX
KW   Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS   Homo sapiens.
XX
PN   US2003099974-A1.
XX
PD   29-MAY-2003.
XX
PF   18-JUL-2002; 2002US-00198846.
XX
```

PR 18-JUL-2001; 2001US-0306220P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX
DR WPI; 2003-787014/74.
XX
PT Novel isolated polypeptide associated with breast cancer, useful for
PT detecting presence of polypeptide in sample, as a marker for breast
PT cancer.
XX
PS Disclosure; SEQ ID NO 6007; 36pp; English.
XX
CC The invention relates to an isolated polypeptide (I) associated with
CC breast cancer which is encoded by a nucleic acid molecule comprising a
CC nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC the polypeptide of the invention. The activity of the polypeptide of the
CC invention may be described as cytostatic. The antibody is useful for
CC detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC invention are useful in the detection of breast tumours. (I) is useful as
CC a marker for breast cancer and in breast cancer therapy. Sequences given
CC in records ACN78851-ACN92934 represent nucleic acid markers associated
CC with breast cancer. Note: The sequence listing does not form part of the
CC specification but may be obtained in electronic format from the USPTO web
CC site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ Sequence 421 BP; 123 A; 51 C; 32 G; 159 T; 0 U; 56 Other;

Query Match 3.1%; Score 69.4; DB 11; Length 421;
Best Local Similarity 53.1%; Pred. No. 3.1e-05;
Matches 103; Conservative 0; Mismatches 91; Indels 0; Gaps 0;

Qy 2049 GGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCC 2108
Db 310 GGCCNNNCCNATTTTTTTTTNNTTNNNTTTTTTTTGGGGNTNGGGGNNNANNATTTTTTT 251

Qy 2109 ATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGG 2168
Db 250 TTTTTTTTTTCCNAATNNTNNNNGGNTTTTTTTTTNNTTTNCCNNAAAAAAAAGGGNTTT 191

Qy 2169 TCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2228
Db 190 TTTTTNCCNTTNGGGNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 131

Qy 2229 AAAAAAAAAAAAAA 2242
Db 130 AAAAAAAAAAAAAA 117

RESULT 166
ACN62215
ID ACN62215 standard; cDNA; 516 BP.
XX
AC ACN62215;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton gynoecium tissue EST Clone ID: LIB3829-026-Q6-N6-F3, SEQ:16996.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 16996; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 516 BP; 325 A; 23 C; 50 G; 118 T; 0 U; 0 Other;

Query Match 3.1%; Score 69.4; DB 13; Length 516;
Best Local Similarity 73.3%; Pred. No. 3.3e-05;
Matches 88; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 65 TTTTTTTTAATTTTTTTTTTTTTTAATTTAAAAAAAAAAAAAAAAGGGGGGCCCCCCCAAA 124

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 125 ACGAAAAAAAAAAACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 184

RESULT 167
ACN58977/c
ID ACN58977 standard; cDNA; 563 BP.
XX
AC ACN58977;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton gynoecium tissue EST Clone ID: LIB3829-014-Q6-N6-C12, SEQ:13758.

```
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 13758; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 563 BP; 207 A; 64 C; 115 G; 177 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 69.4;  DB 13;  Length 563;
  Best Local Similarity   73.3%;  Pred. No. 3.4e-05;
  Matches   88;  Conservative    0;  Mismatches   32;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
             ||| |||| | | |||||||||| | ||   || |||||           | |
Db        182 TTTTTTTTAAAATTTTTTCCTTTTTTTTTCGAAAAAAAAAAAAAAAAAAAAAAAAAAAA 123

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        122 ACCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 63


RESULT 168
ACN56816/c
ID   ACN56816 standard; cDNA; 543 BP.
XX
AC   ACN56816;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-002-Q1-N6-H10, SEQ:11597.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 11597; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
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CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 543 BP; 206 A; 41 C; 81 G; 215 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 69.2;  DB 13;  Length 543;
  Best Local Similarity   74.8%;  Pred. No. 3.7e-05;
  Matches   86;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy       2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
              ||| || | |   ||||| | || ||   |||||  ||  | |||   |          |
Db        161 TTTCCCCCCCCCACCTTTTTTTTTTTTTTAAAAAAATTTTTTTTCCCAAAAAAAAAAAA 102

Qy       2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 47


RESULT 169
AAH71551/c
ID   AAH71551 standard; cDNA; 621 BP.
XX
AC   AAH71551;
XX
DT   19-SEP-2001  (first entry)
XX
DE   Human cervical cancer marker nucleic acid 2825.
XX
KW   Cervical cancer; cytostatic; pre-malignant condition; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   WO200142467-A2.
XX
PD   14-JUN-2001.
XX
PF   08-DEC-2000; 2000WO-US033312.
XX
PR   08-DEC-1999;   99US-0169681P.
PR   21-DEC-1999;   99US-0171350P.
PR   14-MAR-2000; 2000US-0189315P.
PR   12-MAY-2000; 2000US-0203791P.
PR   09-JUN-2000; 2000US-0210600P.
PR   21-JUL-2000; 2000US-0220114P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Deeds J,  Berger A,  Zhao X;
XX
DR   WPI; 2001-375006/39.
XX
PT   New isolated nucleic acid for diagnosing and treating cervical cancer and
PT   for assessing and detecting compounds for treating the cancer.
XX
PS   Claim 1; Page 579; 1051pp; English.
XX
CC   The invention relates to novel genes (AAH68727-AAH73383) associated with
CC   cervical cancer with cytostatic activity. The nucleic acids and encoded
CC   polypeptides are useful: to assess if a patient is afflicted with
CC   cervical cancer or has a pre-malignant condition; to monitor the
CC   progression of cervical cancer or a premalignant condition in a patient;
CC   and to select and/or assess the efficacy of a compound or therapy for
CC   inhibiting cervical cancer in a patient. The nucleic acids may also be
CC   useful for gene therapy
XX
SQ   Sequence 621 BP; 273 A; 63 C; 47 G; 238 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 69.2;  DB 4;  Length 621;
  Best Local Similarity   61.5%;  Pred. No. 3.9e-05;
  Matches  110;  Conservative    0;  Mismatches   69;  Indels    0;  Gaps    0;

Qy       2064 GTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCT 2123
              |||| | ||  |  |  | |  |  |  |       | |  ||||  |||||  |    |
Db        254 GTTTCCCTTTAATTTTATTACCTTTTTTTTTTTGGAATTTTTTCCCCCCAATTTTTTTTT 195

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              || |  |      |  ||| ||||   || ||  | ||||   |  | ||     | |   |
Db        194 TTTCCCTTTTTTTTATTCTTTTTTAATTTTTTTTTAAAAAAATTTTTTTTTTAAATTTTT 135

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        134 TTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 76


RESULT 170
ACN81732/c
ID   ACN81732 standard; DNA; 631 BP.
XX
AC   ACN81732;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Breast cancer related marker, seq id 2882.
XX
KW   Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS   Homo sapiens.
XX
PN   US2003099974-A1.
XX
PD   29-MAY-2003.
XX
PF   18-JUL-2002; 2002US-00198846.
XX
PR   18-JUL-2001; 2001US-0306220P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
DR   WPI; 2003-787014/74.
XX
PT   Novel isolated polypeptide associated with breast cancer, useful for
PT   detecting presence of polypeptide in sample, as a marker for breast
PT   cancer.
XX
PS   Disclosure; SEQ ID NO 2882; 36pp; English.
XX
CC   The invention relates to an isolated polypeptide (I) associated with
CC   breast cancer which is encoded by a nucleic acid molecule comprising a
CC   nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC   the polypeptide of the invention. The activity of the polypeptide of the
CC   invention may be described as cytostatic. The antibody is useful for
CC   detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC   invention are useful in the detection of breast tumours. (I) is useful as
CC   a marker for breast cancer and in breast cancer therapy. Sequences given
CC   in records ACN78851-ACN92934 represent nucleic acid markers associated
CC   with breast cancer. Note: The sequence listing does not form part of the
CC   specification but may be obtained in electronic format from the USPTO web
CC   site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ   Sequence 631 BP; 184 A; 68 C; 101 G; 141 T; 0 U; 137 Other;

  Query Match             3.1%;  Score 69;  DB 11;  Length 631;
  Best Local Similarity   43.2%;  Pred. No. 4.3e-05;
  Matches  117;  Conservative    0;  Mismatches  154;  Indels    0;  Gaps    0;

Qy       1972 CCCCAAGTCCTGTGCAATAGCCCCAGGATTGGATTCCTTCCAACCTTTTAGCATATCTCC 2031
              ||||  |    |      |  |||| ||       |          | ||| |       |
Db        381 CCCCCNGGGNNGGNTTTTTTCCCCNGGNANNCNNTTTNNNNTTNCNTTTNGNCCCCNTTN 322

Qy       2032 AACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCG 2091
                ||       ||  |            |    | |  |||  |
Db        321 NCCCCCNNNNNTTTTTNNNNNNNNNNNNTTTTTTNTTTTTTTTTTTTNNNNNNNNNAANN 262
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Qy       2092 TGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTT 2151
              |  |   |    ||      | ||     |||     | |||  ||   |
Db        261 NTTTTTTTTTTNNNTTTNCCCCCCCCCCCCCNNTTTTTNTTTTTTTTTTTTTNANTNNC 202

Qy       2152 ATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAA 2211
                || |||||  ||  | |                |||||||||||||||||||||||
Db        201 NNNAAAAAAAAANTTTTTTTTNNNNNNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 142

Qy       2212 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||
Db        141 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 111
```

RESULT 171
ADI70087/c
ID ADI70087 standard; DNA; 392 BP.
XX
AC ADI70087;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #2829.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 2829; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 392 BP; 56 A; 34 C; 59 G; 152 T; 0 U; 91 Other;

```
  Query Match             3.1%;  Score 68.8;  DB 5;  Length 392;
  Best Local Similarity   71.2%;  Pred. No. 4.1e-05;
  Matches   79;  Conservative    0;  Mismatches   32;  Indels    0;  Gaps    0;

Qy       2132 CCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAA 2191
              ||    |||  ||||  | | || | || ||   |   |  | | |          |||||
Db        186 CCCNNTTTTTTTTTTNCCNTTTTTAAAANAANNNTNNNCNNCCCNAAAAAAAAAAAAAAA 127

Qy       2192 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        126 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 76
```

RESULT 172
ADI76417/c
ID ADI76417 standard; DNA; 392 BP.
XX
AC ADI76417;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #9159.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 9159; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene

CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 392 BP; 56 A; 34 C; 59 G; 152 T; 0 U; 91 Other;

Query Match 3.1%; Score 68.8; DB 5; Length 392;
Best Local Similarity 71.2%; Pred. No. 4.1e-05;
Matches 79; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

Qy 2132 CCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAA 2191
|| ||| |||| | | || | || || | | | | |||||
Db 186 CCCNNTTTTTTTTTTNCCNTTTTTAAAANAANNNTNNNCNNCCCNAAAAAAAAAAAAAAA 127

Qy 2192 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 126 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 76

RESULT 173
ABK72068
ID ABK72068 standard; cDNA; 963 BP.
XX
AC ABK72068;
XX
DT 13-AUG-2002 (first entry)
XX
DE Human cDNA encoding ovarian antigen #27.
XX
KW Human; ss; ovarian antigen; gene; ovary disorder; breast disorder;
KW neoplastic disorder; cancer; infectious disease; inflammatory disease;
KW reproductive system disorder; autoimmune disorder; Alzheimer's disease;
KW blood-related disorder; hyperproliferative disorder; hair loss;
KW urinary system disorder; cardiovascular disorder; arrhythmia;
KW respiratory disorder; musculoskeletal system disorder;
KW neural activity disorder; neurological disorder; endocrine disorder;
KW gastrointestinal disorder; liver disorder; pancreatic disorder;
KW gall bladder disorder; large intestine disorder; developmental disorder;
KW inherited disorder; wound healing; skin aging; food additive;
KW preservative.
XX
OS Homo sapiens.
XX
PN WO200155329-A2.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001360.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 07-JUN-2000; 2000US-0209467P.
PR 14-SEP-2000; 2000US-0232398P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251990P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-476195/51.
DR P-PSDB; ABG60265.
XX
PT Novel isolated human ovarian related polypeptide useful for
PT diagnosis/treatment of disorders of ovary and breast such as neoplastic
PT disorders, infectious diseases, inflammatory diseases, and reproductive
PT disorders.
XX
PS Claim 1; SEQ ID NO 37; 524pp; English.
XX
CC The invention relates to isolated ovarian related polypeptide (ovarian
CC antigen) comprising a sequence at least 90% identical to a sequence
CC selected from a polypeptide fragment, domain, epitope or full length
CC protein of a sequence (S1) appearing as ABG60239-ABG60296 having
CC biological activity, or a variant, allelic variant or species homologue
CC of S1. Also included are the cDNA clones encoding the proteins of S1. S1,
CC an anti-S1 antibody and the cDNA are useful for diagnosing, preventing,
CC treating or ameliorating a medical condition in mammalian subject
CC especially diseases and/or disorders of the ovary and/or breast such as
CC neoplastic disorders (such as ovarian Krukenberg tumour and cancer),
CC infectious diseases (e.g., mastitis, oophoritis), inflammatory diseases
CC (e.g., abscesses), reproductive system disorders (Paget's disease),
CC autoimmune disorders (systemic lupus erythematosus, rheumatoid
CC arthritis), blood-related disorders (sickle cell anaemia),
CC hyperproliferative disorders, urinary system disorders
CC (glomerulonephritis), cardiovascular disorders (arrhythmias), respiratory
CC disorders, musculoskeletal system disorders, neural activity and
CC neurological disorders (Alzheimer's disease and Parkinson's disease),
CC endocrine disorders (Addison's disease), gastrointestinal disorders
CC (inflammatory disorders), liver disorders (biliary liver cirrhosis),
CC pancreatic and gall bladder disorders, disorders of the large intestine,
CC developmental and inherited disorders, diseases at the cellular level,
CC and wound healing and epithelial cell proliferation. They are also useful
CC to prevent skin aging, for preventing hair loss, to maintain organs
CC before transplantation or for supporting cell culture of primary tissues,
CC to modulate mammalian characteristics such as body height, to modulate
CC mammalian metabolism, to change a mammal's mental or physical state, and
CC as food additive or preservative. The present sequence is a cDNA encoding
CC an S1 protein
XX
SQ Sequence 963 BP; 277 A; 264 C; 299 G; 123 T; 0 U; 0 Other;

Query Match 3.1%; Score 68.8; DB 5; Length 963;
Best Local Similarity 78.1%; Pred. No. 5.4e-05;
Matches 82; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy 2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAA 2197
|||| | || | ||||||||| | | || |||| | ||||||||||
Db 847 TTTCTCTACATAAAAGTAATAAAAAGTTGTCTTTCGGCCACCGTGAAAAAAAAAAAAAAA 906

Qy 2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
||||||||||||||||||||||||||||||||||||||||||||||
Db 907 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 951

RESULT 174
ABK91660
ID ABK91660 standard; cDNA; 963 BP.
XX
AC ABK91660;

XX
DT 26-AUG-2002 (first entry)
XX
DE cDNA encoding novel ovarian related polypeptide #27.
XX
KW Ovarian related polypeptide; neoplastic disorder; tumour; ovarian cancer;
KW hyperproliferative disorder; adult acute lymphocytic leukaemia;
KW breast cancer; reproductive system disorder; tuberculosis; arthritis;
KW immune system disorder; Chediak-Higashi's syndrome; neonatal neutropenia;
KW autoimmune disorder; Hashimoto's thyroiditis; inflammatory disorder;
KW septic shock; multiple sclerosis; central nervous system disorder;
KW neurological disorder; allergy; Parkinson's disease; Alzheimer's disease;
KW cardiovascular disorder; atherosclerosis; blood related disorder;
KW respiratory disorder; urinary system disorder; musculoskeletal disorder;
KW osteoporosis; wound healing; endocrine disorder; infectious disease;
KW gastrointestinal disorder; transplantation; food additive; preservative;
KW gene; ss.
XX
OS Homo sapiens.
XX
PN US2002045230-A1.
XX
PD 18-APR-2002.
XX
PF 20-JUL-2001; 2001US-00908711.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
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PR 01-SEP-2000; 2000US-0229345P.
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PR 05-SEP-2000; 2000US-0229513P.
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PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
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PR 20-OCT-2000; 2000US-0240960P.
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PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
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PR 08-NOV-2000; 2000US-0246525P.
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PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
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PR 17-NOV-2000; 2000US-0249297P.
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PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
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PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764853.
PR 17-JAN-2001; 2001US-00764856.
PR 17-JAN-2001; 2001US-00764864.
PR 17-JAN-2001; 2001US-00764867.
PR 17-JAN-2001; 2001US-00764868.
PR 17-JAN-2001; 2001US-00764869.
PR 17-JAN-2001; 2001US-00764870.
PR 17-JAN-2001; 2001US-00764874.
PR 17-JAN-2001; 2001US-00764882.
PR 17-JAN-2001; 2001US-00764888.
PR 17-JAN-2001; 2001US-00764891.
PR 17-JAN-2001; 2001US-00764892.
PR 17-JAN-2001; 2001US-00764896.
PR 17-JAN-2001; 2001US-00764898.
PR 17-JAN-2001; 2001US-00764902.
PR 17-JAN-2001; 2001US-00764905.
PR 17-JAN-2001; 2001WO-US001239.
PR 17-JAN-2001; 2001WO-US001307.
PR 17-JAN-2001; 2001WO-US001312.
PR 17-JAN-2001; 2001WO-US001320.
PR 17-JAN-2001; 2001WO-US001329.
PR 17-JAN-2001; 2001WO-US001334.
PR 17-JAN-2001; 2001WO-US001336.
PR 17-JAN-2001; 2001WO-US001339.
PR 17-JAN-2001; 2001WO-US001340.
PR 17-JAN-2001; 2001WO-US001341.
PR 17-JAN-2001; 2001WO-US001344.
PR 17-JAN-2001; 2001WO-US001345.
PR 17-JAN-2001; 2001WO-US001347.
PR 17-JAN-2001; 2001WO-US001348.
PR 17-JAN-2001; 2001WO-US001360.
XX
PA (ROSE/) ROSEN C A.
PA (RUBI/) RUBIN S M.
PA (BARA/) BARASH S C.

Query Match 3.1%; Score 68.8; DB 6; Length 963;
Best Local Similarity 78.1%; Pred. No. 5.4e-05;
Matches 82; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

```
Qy       2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAA 2197
              ||||  |  ||   | |||||||||  |   | ||  |||| |      ||||||||||
Db        847 TTTCTCTACATAAAAGTAATAAAAAGTTGTCTTTCGGCCACCGTGAAAAAAAAAAAAAAA 906

Qy       2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||
Db        907 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 951
```

RESULT 175
AAC59534
ID AAC59534 standard; cDNA; 1086 BP.
XX
AC AAC59534;
XX
DT 15-FEB-2001 (first entry)
XX
DE Human secreted protein cDNA sequence #28.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein; ss.
XX
OS Homo sapiens.
XX
PN WO200055352-A2.
XX
PD 21-SEP-2000.
XX
PF 09-MAR-2000; 2000WO-US006044.
XX
PR 12-MAR-1999; 99US-0124099P.
PR 03-DEC-1999; 99US-0168661P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Komatsoulis G;
XX
DR WPI; 2000-602124/57.
DR P-PSDB; AAB34243.
XX
PT Novel human secreted proteins useful for diagnosis, prevention and
PT treatment of disorders including neurological, cell proliferative,
PT cardiovascular, autoimmune and inflammatory disorders and microbial
PT infections.
XX
PS Claim 1; Page 334; 383pp; English.
XX
CC The invention relates to the isolation of genes AAC59507-C59556 encoding
CC 50 human secreted proteins AAB34218-B34264) The genes can be used to
CC generate fusion proteins by linking to the gene for the human
CC immunoglobulin G Fc portion (AAC59498) for increasing the stability of
CC the fusion protein as compared to the human protein only. The genes and
CC proteins are useful for preventing, ameliorating or treating medical
CC conditions, e.g. by protein or gene therapy. The genes are isolated from
CC a range of human tissues disclosed in the specification. The nucleic
CC acids, proteins, antibodies and (ant)agonists are useful in the
CC diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b)
CC immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections
XX
SQ Sequence 1086 BP; 291 A; 249 C; 245 G; 301 T; 0 U; 0 Other;

Query Match 3.1%; Score 68.8; DB 3; Length 1086;
Best Local Similarity 70.5%; Pred. No. 5.6e-05;
Matches 91; Conservative 0; Mismatches 38; Indels 0; Gaps 0;

```
Qy       2114 ATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCC 2173
              |||||  | | |   ||   |   ||  ||  || ||    || ||| | ||  | ||
Db        943 ATGATTTCATGTTTCTTTTAAAGGTTGTTTTGCATGTTGAATATTAAATTTTTTTTTTCT 1002

Qy       2174 ACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2233
                ||  |||  ||||||||||||||||||||||||||||||||||||||||||||||||
Db       1003 GTGTCTTCCTCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1062

Qy       2234 AAAAAAAAA 2242
              |||||||||
Db       1063 AAAAAAAAA 1071
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RESULT 176

```
ADC38712
ID   ADC38712 standard; cDNA; 1499 BP.
XX
AC   ADC38712;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Human cDNA encoding a secreted protein #35.
XX
KW   ss; gene; immune disorder; severe combined immunodeficiency; SCID;
KW   autoimmune disorder; multiple sclerosis; systemic lupus erythematosus;
KW   rheumatoid arthritis; allergic reaction; asthma; myeloid cell deficiency;
KW   lymphoid cell deficiency; osteoporosis; osteoarthritis;
KW   peripheral nervous system disease; peripheral neuropathy;
KW   Alzheimer's disease; Parkinson's disease; coagulation disorder;
KW   inflammatory disease; systemic inflammatory response syndrome; SIRS;
KW   ischaemia-reperfusion injury; Crohn's disease; anaphylaxis;
KW   hypersensitivity; regeneration; neural cell proliferation; fertility;
KW   tumour; chemokine; human; secreted protein.
XX
OS   Homo sapiens.
XX
PN   US2002193567-A1.
XX
PD   19-DEC-2002.
XX
PF   02-APR-2002; 2002US-00114893.
XX
PR   11-AUG-1995;   95US-00514014.
PR   05-APR-1996;   96US-00628364.
PR   19-APR-1996;   96US-00635311.
PR   07-JUN-1996;   96US-00659224.
PR   17-JUN-1996;   96US-00664596.
PR   09-JUL-1996;   96US-00677231.
PR   26-JUL-1996;   96US-00686878.
PR   23-AUG-1996;   96US-00701819.
PR   27-SEP-1996;   96US-00721488.
PR   27-SEP-1996;   96US-00721798.
PR   27-SEP-1996;   96US-00721923.
PR   27-SEP-1996;   96US-00721926.
PR   25-OCT-1996;   96US-00738367.
PR   30-OCT-1996;   96US-00739775.
PR   13-JAN-1997;   97US-00783395.
PR   10-APR-1997;   97US-00833823.
PR   02-JUN-1997;   97US-00867677.
PR   05-SEP-1997;   97US-00924838.
PR   06-OCT-1999;   99US-00413232.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Bowman MR,  Spaulding V,  Carlin-Duckett M;
PI   Kelleher K;
XX
DR   WPI; 2003-657236/62.
DR   P-PSDB; ADC38713.
XX
PT   Proteins AZ3021 encoded by clone AZ3021 from human adult colon, and
PT   BD12716 encoded by clone BD12716 from human fetal kidney cDNA library,
PT   useful for treating e.g. multiple sclerosis and rheumatoid arthritis.
XX
PS   Claim 1; SEQ ID NO 70; 412pp; English.
XX
CC   The invention relates to a protein comprising fully defined AZ302 1
CC   protein or BD127 1 6 protein. The polynucleotides are useful for
CC   expressing recombinant proteins for analysis and are also useful as
CC   chromosome markers or tags to identify chromosomes or to map related gene
CC   positions. The proteins are useful as amino acid supplement, carbon
CC   source, nitrogen source and carbohydrate source. The proteins are useful
CC   for treating various immune deficiencies and disorders (e.g. severe
CC   combined immunodeficiency (SCID)), autoimmune disorders (e.g. multiple
CC   sclerosis, systemic lupus erythematosus, rheumatoid arthritis), allergic
CC   reactions (e.g. asthma), myeloid or lymphoid cell deficiencies,
CC   osteoporosis or osteoarthritis, peripheral nervous system diseases (e.g.
CC   peripheral neuropathy, Alzheimer's disease, Parkinson's disease),
CC   coagulation disorders, inflammatory diseases (e.g. systemic inflammatory
CC   response syndrome (SIRS), ischaemia-reperfusion injury, Crohn's disease),
CC   anaphylaxis and hypersensitivity. Proteins are also useful for inducing
CC   tumour immunity, for inducing bone, cartilage, tendon, ligament and/or
CC   nerve growth or regeneration, for proliferating neural cells and for
CC   regenerating nerve and brain tissue, for inducing fertility and for
CC   inhibiting tumour growth. Proteins are also useful as chemokine for
CC   mammalian cells (e.g., monocytes, fibroblasts, neutrophils), and also
CC   useful as inhibitors of receptor/ligand interactions. The present
CC   sequence represents cDNA encoding a human secreted protein.
XX
SQ   Sequence 1499 BP; 526 A; 298 C; 312 G; 363 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.8;  DB 10;  Length 1499;
  Best Local Similarity   75.2%;  Pred. No. 6.2e-05;
  Matches   85;  Conservative    0;  Mismatches   28;  Indels    0;  Gaps    0;

Qy       2130 TACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAA 2189
             | | ||| |    |   ||  | | |||||| || ||| | || || | |       |||
Db       1367 TTCAACTTTAGTTTAAAATTATGTGAATAAATATTTTGATTTCTACAAATCTTAAAAAAA 1426

Qy       2190 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1427 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1479


RESULT 177
ABX36078/c
ID   ABX36078 standard; cDNA; 291 BP.
XX
AC   ABX36078;
XX
DT   20-FEB-2003  (first entry)
XX
DE   Bovine EST associated with lactation/muscle/fat deposition #1243.
XX
KW   Bovine; ss; EST; expressed sequence tag; lactation; LMFD;
KW   muscle deposition; fat deposition; genome mapping; gene identification;
KW   gene analysis; cattle breeding.
XX
OS   Bos Taurus.
XX
PN   US2002137139-A1.
XX
PD   26-SEP-2002.
XX
PF   24-SEP-2001; 2001US-00960352.
XX
PR   12-JAN-1999;   99US-0115707P.
PR   11-JAN-2000; 2000US-00480902.
XX
PA   (BYAT/) BYATT J C.
PA   (MATH/) MATHIALAGAN N.
PA   (TAON/) TAO N.
PA   (WARR/) WARREN W C.
XX
PI   Byatt JC,  Mathialagan N,  Tao N,  Warren WC;
XX
DR   WPI; 2003-110599/10.
XX
PT   New nucleic acid associated with lactation, and muscle and fat
PT   deposition, useful for genome mapping, gene identification and analysis,
PT   cattle breeding, or for genetically improving cattle.
XX
PS   Claim 2; SEQ ID NO 1243; 245pp; English.
XX
CC   The invention relates to a purified nucleic acid molecule associated with
CC   lactation or muscle and fat deposition (designated LMFD), derived from
CC   cattle, and the LMFD nucleic acid can specifically hybridise to a second
CC   nucleic acid molecule comprising any of 15112 nucleotide sequences,
CC   appearing as ABX34836-ABX49947, or complements of them. Also included are
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CC   ; (1) a transformed cell having a nucleic acid comprising an LMFD nucleic
CC   acid linked to a promoter and a 3' non- translated sequence that
CC   functions in the cell to cause termination of transcription and addition
CC   of polyadenylated ribonucleotides to a 3' end of the mRNA molecule; and
CC   (2) determining a level or pattern of a molecule in a bovine cell or
CC   tissue comprising: (a) incubating a marker nucleic acid (comprising any
CC   of the 15112 nucleic acid sequences or its complement or fragment) with a
CC   complementary nucleic acid molecule obtained from the bovine cell or
CC   tissue, where hybridisation between the marker nucleic acid and the
CC   complementary nucleic acid permits the detection of the molecule; and (b)
CC   detecting the level or pattern of the complementary nucleic acid, where
CC   the detection of the complementary nucleic acid is predictive of the
CC   level or pattern of the molecule. The LMFD nucleic acid is used for
CC   determining a level or pattern of a molecule in a bovine cell or tissue.
CC   It is useful for genome mapping, gene identification and analysis, cattle
CC   breeding, preparation of constructs for use in cattle gene expression, or
CC   for genetically improving cattle. The present sequence is one of the
CC   15112 bovine LMFD EST (expressed sequence tag) nucleic acids. Note: The
CC   present sequence was not shown in the specification but was obtained in
CC   electronic format from the USPTO web site:
CC   seqdata.uspto.gov/sequence.html?DocID=20020137139
XX
SQ   Sequence 291 BP; 54 A; 20 C; 39 G; 178 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.6;  DB 8;  Length 291;
  Best Local Similarity   80.0%;  Pred. No. 4.1e-05;
  Matches   80;  Conservative    0;  Mismatches   20;  Indels    0;  Gaps    0;

Qy       2143 TTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAA 2202
             |||| | ||   |  |||||||||  || | |  | |   ||| ||||||||||||| |||
Db        212 TTTTTTTTTTAAATAAAAAATGTTTTTCCCAAAAAATTTTTCCAAAAAAAAAAAAATAAA 153

Qy       2203 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             |||||||||||||||||||||||||||||| |||||||\
Db        152 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATAAAAAAA 113


RESULT 178
ADK61481/c
ID   ADK61481 standard; DNA; 380 BP.
XX
AC   ADK61481;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Ovarian cancer-related DNA #636 with altered ovarian cancer expression.
XX
KW   ds; gene; ovarian tumor; BRCA-1-like; BRCA-2-like; non-BRCA-like;
KW   gene expression; primer; cancer.
XX
OS   Homo sapiens.
XX
PN   WO2003068054-A2.
XX
PD   21-AUG-2003.
XX
PF   13-FEB-2003; 2003WO-US004688.
XX
PR   13-FEB-2002; 2002US-0357031P.
XX
PA   (USSH ) US DEPT HEALTH & HUMAN SERVICES.
PA   (SLOK ) SLOAN KETTERING INST CANCER RES.
XX
PI   Jazaeri AA,  Boyd J,  Liu ET;
XX
DR   WPI; 2003-689589/65.
XX
PT   Classifying an ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-
PT   like tumor by determining a pattern of expression in the ovarian tumor of
PT   several markers.
XX
PS   Disclosure; SEQ ID NO 651; 137pp; English.
XX
CC   The invention relates to a method of classifying an ovarian tumor as a
CC   BRCA-1-like or BRCA-2-like or non-BRCA-like tumor by: (1) determining a
CC   pattern of expression in the ovarian tumor of several markers given in
CC   the specification; and (2) comparing a similarity of the pattern of
CC   expression of the markers in the ovarian tumor to a pattern of expression
CC   of the markers in a comparison tissue of a known BRCA-1-like or BRCA-2-
CC   like or non-BRCA-like tumor. The method is useful for classifying an
CC   ovarian tumor as a BRCA-1-like or BRCA-2-like or non-BRCA-like tumor.
CC   This sequence corresponds to an ovarian cancer -related gene having an
CC   altered pattern of expression in ovarian cancer. (Note: The sequence data
CC   for this patent did not form part of the printed specification but was
CC   obtained in electronic format from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences).
XX
SQ   Sequence 380 BP; 137 A; 81 C; 74 G; 88 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.6;  DB 10;  Length 380;
  Best Local Similarity   71.8%;  Pred. No. 4.5e-05;
  Matches   89;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2119 CGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCAC 2178
             | | |||| ||| |  || |||  |||    || ||| |     || |  |       |
Db        142 CCCTTTTGGTTTCCTTCTTTTTTTTTTGGGGTTTTTATTTCCCCTGGTTTTTGGGGGGCC 83

Qy       2179 TGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2238
              |  |||| ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         82 CGGGTCCCGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 23

Qy       2239 AAAA 2242
              ||||
Db         22 AAAA 19


RESULT 179
AAI87378
ID   AAI87378 standard; cDNA; 411 BP.
XX
AC   AAI87378;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 7438.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO07447.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 1; SEQ ID NO 7438; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
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CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 411 BP; 171 A; 88 C; 82 G; 69 T; 0 U; 1 Other;

  Query Match             3.1%;  Score 68.6;  DB 4;  Length 411;
  Best Local Similarity   71.2%;  Pred. No. 4.6e-05;
  Matches   89;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy       2118 TCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCA 2177
             || || | || ||||   | |  | | |   | ||   || | ||| |    |    ||
Db         53 TCACCCTAGCATTACTTATATGACATGTCTCCATACCCATTACAATCTCCAGCATTCCCC 112

Qy       2178 CTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2237
              ||    || ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        113 CTCANACCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 172

Qy       2238 AAAAA 2242
              |||||
Db        173 AAAAA 177


RESULT 180
ADL43533/c
ID   ADL43533 standard; DNA; 492 BP.
XX
AC   ADL43533;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #17423.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 17423; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 492 BP; 134 A; 68 C; 123 G; 167 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.6;  DB 5;  Length 492;
  Best Local Similarity   74.1%;  Pred. No. 4.9e-05;
  Matches   86;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186
              | |  ||  | |||  |||| | ||   || |||||  ||||| |      |   | |
Db        254 CCTCGCCGTTTTTTTTTTTTTTTTTCAAAAAAAAAAATTGGTTTTTTTTTTTTTTTTC 195

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||| ||||||||||||||||||||||||||||||||||||||||
Db        194 AAAAAAAAAAAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 139


RESULT 181
ACN61307/c
ID   ACN61307 standard; cDNA; 529 BP.
XX
AC   ACN61307;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-036-Q1-N6-A9, SEQ:16088.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
```
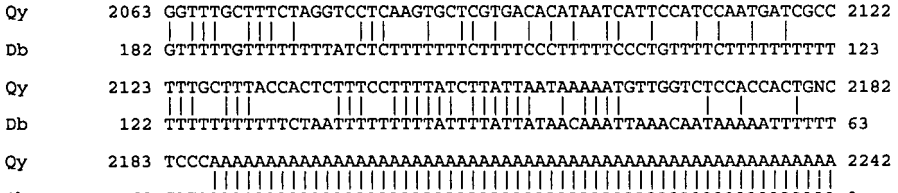
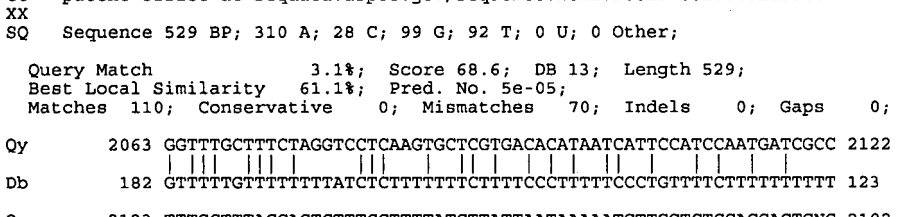

PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 16088; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 529 BP; 310 A; 28 C; 99 G; 92 T; 0 U; 0 Other;

Query Match 3.1%; Score 68.6; DB 13; Length 529;
Best Local Similarity 61.1%; Pred. No. 5e-05;
Matches 110; Conservative 0; Mismatches 70; Indels 0; Gaps 0;



RESULT 182
AAH70075/c
ID AAH70075 standard; cDNA; 550 BP.
XX
AC AAH70075;
XX
DT 19-SEP-2001 (first entry)
XX
DE Human cervical cancer marker nucleic acid 1349.
XX
KW Cervical cancer; cytostatic; pre-malignant condition; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN WO200142467-A2.
XX
PD 14-JUN-2001.
XX
PF 08-DEC-2000; 2000WO-US033312.
XX
PR 08-DEC-1999; 99US-0169681P.
PR 21-DEC-1999; 99US-0171350P.
PR 14-MAR-2000; 2000US-0189315P.
PR 12-MAY-2000; 2000US-0203791P.
PR 09-JUN-2000; 2000US-0210600P.
PR 21-JUL-2000; 2000US-0220114P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Deeds J, Berger A, Zhao X;
XX
DR WPI; 2001-375006/39.
XX
PT New isolated nucleic acid for diagnosing and treating cervical cancer and
PT for assessing and detecting compounds for treating the cancer.
XX
PS Claim 1; Page 313; 1051pp; English.
XX
CC The invention relates to novel genes (AAH68727-AAH73383) associated with
CC cervical cancer with cytostatic activity. The nucleic acids and encoded
CC polypeptides are useful: to assess if a patient is afflicted with
CC cervical cancer or has a pre-malignant condition; to monitor the
CC progression of cervical cancer or a premalignant condition in a patient;
CC and to select and/or assess the efficacy of a compound or therapy for
CC inhibiting cervical cancer in a patient. The nucleic acids may also be
CC useful for gene therapy
XX
SQ Sequence 550 BP; 133 A; 41 C; 73 G; 197 T; 0 U; 106 Other;

Query Match 3.1%; Score 68.6; DB 4; Length 550;
Best Local Similarity 62.3%; Pred. No. 5e-05;
Matches 86; Conservative 0; Mismatches 52; Indels 0; Gaps 0;



RESULT 183
AAF94825/c
ID AAF94825 standard; cDNA; 396 BP.
XX
AC AAF94825;
XX
DT 23-MAY-2001 (first entry)
XX
DE Human ovarian cancer associated coding sequence SEQ ID NO: 16.
XX
KW Human, ovarian cancer; vaccine; gene therapy; carcinoma; ss.
XX
OS Homo sapiens.
XX
PN WO200118046-A2.
XX

PD 15-MAR-2001.
XX
PF 08-SEP-2000; 2000WO-US024827.
XX
PR 10-SEP-1999; 99US-00394374.
PR 01-MAY-2000; 2000US-00561778.
PR 15-AUG-2000; 2000US-00640173.
PR 07-SEP-2000; 2000US-00656668.
XX
PA (CORI-) CORIXA CORP.
XX
PI Xu J, Stolk JA;
XX
DR WPI; 2001-211395/21.
XX
PT Isolated polypeptides associated with ovarian carcinomas, and the nucleic
PT acids that encode them, useful for the prevention diagnosis and treatment
PT of ovarian cancers.
XX
PS Claim 5; Page 121; 189pp; English.
XX
CC The present invention provides a number of coding sequences and proteins,
CC the over-expression of which is associated with ovarian carcinoma/cancer.
CC These can be used in the diagnosis, treatment and prevention of ovarian
CC cancer, optionally by gene therapy or in the form of a vaccine. The
CC present sequence is an example of one of these sequences
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 4; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
Db 59 AAAAAAAAAAAA 48

RESULT 184
ABL48775/c
ID ABL48775 standard; cDNA; 396 BP.
XX
AC ABL48775;
XX
DT 18-JUN-2002 (first entry)
XX
DE Ovarian carcinoma sequence isolate 23660.1.
XX
KW Ovarian cancer; cancer therapy; vaccine; gene therapy; tumour; cancer;
KW ss.
XX
OS Homo sapiens.
XX
PN US2002004491-A1.
XX
PD 10-JAN-2002.
XX
PF 03-APR-2001; 2001US-00825294.
XX
PR 10-SEP-1999; 99US-00394374.
PR 01-MAY-2000; 2000US-00561778.
PR 15-AUG-2000; 2000US-00640173.
PR 07-SEP-2000; 2000US-00656668.
PR 14-NOV-2000; 2000US-00713550.
XX
PA (XUJJ/) XU J.
PA (STOL/) STOLK J A.
PA (ALGA/) ALGATE P A.
PA (FLIN/) FLING S P.
XX
PI Xu J, Stolk JA, Algate PA, Fling SP;
XX
DR WPI; 2002-171027/22.
XX
PT Ovarian tumor polypeptide and polynucleotide useful in diagnosis,
PT prevention and/or treatment of cancer, especially ovarian cancer.
XX
PS Claim 1a; Page 44; 131pp; English.
XX
CC The invention relates to ovarian tumour polynucleotides and polypeptides
CC that may be utilised in cancer therapy, for example in a vaccine or gene
CC therapy. Polypeptides and polynucleotides of the invention are useful for
CC detecting a cancer in a patient, for stimulating and/or expanding T-cells
CC specific for a tumour protein, and for inhibiting the development of a
CC cancer in a patient. They are also useful for stimulating an immune
CC response in a patient, and for treating a cancer in a patient and for
CC determining the presence of a cancer in a patient. The isolated
CC polynucleotides of the invention are useful for their ability to
CC selectively form duplex molecules with complementary stretches of the
CC entire desired gene or gene fragments, and for designing and preparing
CC ribozyme molecules for inhibiting expression of tumour polypeptides in
CC tumour cells. Polypeptides and polynucleotides of the invention are also
CC useful in recombinant DNA molecules to direct expression of a polypeptide
CC in appropriate host cells. The sequences given in records ABL48760-
CC ABL48956 represent polynucleotides encoding ovarian carcinoma proteins
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 6; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
Db 59 AAAAAAAAAAAA 48

RESULT 185
ABT03092/c
ID ABT03092 standard; cDNA; 396 BP.
XX
AC ABT03092;
XX
DT 05-SEP-2002 (first entry)
XX
DE Human ovarian carcinoma associated coding sequence SEQ ID NO: 16.
XX
KW Human; ovarian cancer; ovarian carcinoma; gene therapy; immunotherapy;
KW cytostatic; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200239885-A2.
XX
PD 23-MAY-2002.
XX
PF 13-NOV-2001; 2001WO-US045395.
XX
PR 14-NOV-2000; 2000US-00713550.
PR 03-APR-2001; 2001US-00825294.

PR 02-OCT-2001; 2001US-00970966.
XX
PA (CORI-) CORIXA CORP.
XX
PI Xu J, Stolk JA, Algate PA, Fling SP, Molesh DA;
XX
DR WPI; 2002-500186/53.
XX
PT Novel ovarian cancer polypeptide and polynucleotide, useful for detecting
PT the presence of ovarian cancer in a patient, and in pharmaceutical
PT compositions, e.g. vaccines, for treating ovarian cancer.
XX
PS Example 1; Page 118; 197pp; English.
XX
CC The present invention provides human ovarian cancer associated proteins
CC and coding sequences. The sequences can be used in the diagnosis and
CC treatment of ovarian cancers. The present sequence is a coding sequence
CC of the invention
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 6; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
Db 59 AAAAAAAAAAAA 48

RESULT 186
ADM10685/c
ID ADM10685 standard; cDNA; 396 BP.
XX
AC ADM10685;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian carcinoma-associated cDNA 23660.1.
XX
KW ovarian; tumour protein; cancer; T cell; CD4+ cell; CD8+ cell;
KW cytostatic; gene therapy; human; ss.
XX
OS Homo sapiens.
XX
PN US2003206918-A1.
XX
PD 06-NOV-2003.
XX
PF 05-FEB-2003; 2003US-00361811.
XX
PR 10-SEP-1999; 99US-00394374.
PR 01-MAY-2000; 2000US-00561778.
PR 15-AUG-2000; 2000US-00640173.
PR 07-SEP-2000; 2000US-00656668.
PR 14-NOV-2000; 2000US-00713550.
PR 03-APR-2001; 2001US-00825294.
PR 02-OCT-2001; 2001US-00970966.
PR 02-AUG-2002; 2002US-00212677.
XX
PA (CORI-) CORIXA CORP.
XX
PI Fanger GR, Fling SP;
XX
DR WPI; 2003-901037/82.
XX
PT New polynucleotides encoding tumor proteins, treating or inhibiting the
PT development of cancer, particularly ovarian cancer, and for stimulating
PT and/or expanding T cells specific for a tumor protein.
XX
PS Example 1; SEQ ID NO 16; 221pp; English.
XX
CC This invention describes a novel ovarian tumour protein which can be used
CC to detecting the presence of an ovarian cancer in a patient by
CC stimulating and/or expanding T cells specific for the tumour protein. The
CC products of the invention can also be used in a method to inhibit the
CC development of a cancer in a patient comprising (a) incubating CD4+
CC and/or CD8+ T cells isolated from a patient with at least one ovarian
CC tumour protein, such that T cell proliferate and (b) administering to the
CC patient the proliferated T cells. The cytostatic polynucleotides or
CC polypeptides described in the invention are useful for treating or
CC inhibiting the development of cancer, particularly ovarian cancer and for
CC stimulating and/or expanding T cells specific for a tumour protein or for
CC gene therapy.
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 11; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
Db 59 AAAAAAAAAAAA 48

RESULT 187
ADJ11015/c
ID ADJ11015 standard; cDNA; 396 BP.
XX
AC ADJ11015;
XX
DT 15-APR-2004 (first entry)
XX
DE Representative human ovarian carcinoma cDNA SeqID 16.
XX
KW human; ss; ovarian cancer; immunogenic; antibody;
KW antigen presenting cell; APC; immune system cell; T cell; tumourigenic;
KW cytostatic.
XX
OS Homo sapiens.
XX
PN US2003232056-A1.
XX
PD 18-DEC-2003.
XX
PF 14-FEB-2003; 2003US-00369186.
XX
PR 10-SEP-1999; 99US-00394374.
PR 01-MAY-2000; 2000US-00561778.
PR 15-AUG-2000; 2000US-00640173.
PR 07-SEP-2000; 2000US-00656668.
PR 14-NOV-2000; 2000US-00713550.
PR 03-APR-2001; 2001US-00825294.
PR 02-OCT-2001; 2001US-00970966.
PR 02-AUG-2002; 2002US-00212677.
PR 05-FEB-2003; 2003US-00361811.
XX
PA (CORI-) CORIXA CORP.
XX

PI Fanger GR, Fling SP;
XX
DR WPI; 2004-178717/17.
XX
PT Novel isolated ovarian tumor polynucleotide encoding ovarian tumor
PT polypeptide, useful as probes of primers for detecting presence of cancer
PT in a patient.
XX
PS Example 1; SEQ ID NO 16; 222pp; English.
XX
CC This invention relates to novel isolated polynucleotides and methods for
CC the therapy and diagnosis of cancer, particularly ovarian cancer.
CC Specifically, it refers to these polynucleotides and the encoded
CC polypeptides thereof, as well as immunogenic peptides, antibodies,
CC antigen presenting cells (APCs) and immune system cells (e.g. T cells)
CC that are targeted to those cells expressing the proteins of interest. The
CC present invention describes methods that are useful for stimulating and/
CC or expanding T cells specific for a tumourigenic protein (i.e. T cell
CC therapy). Furthermore, compositions can be used for the diagnosis,
CC treatment and/ or prevention of ovarian cancer by stimulating an immune
CC response in a patient. Accordingly, these compositions exhibit cytostatic
CC activity. This polynucleotide sequence is a representative human ovarian
CC carcinoma cDNA sequence of the invention.
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 12; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
|| | || | ||| | ||| | | | ||||| || |
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
|| | | |||||||||||||||||||||||||||||||||||||||||||||||||
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
||||||||||||
Db 59 AAAAAAAAAAAA 48

RESULT 188
ADM43276/c
ID ADM43276 standard; cDNA; 396 BP.
XX
AC ADM43276;
XX
DT 03-JUN-2004 (first entry)
XX
DE Human ovarian carcinoma cDNA #16.
XX
KW ss; human; cancer; ovarian cancer; ovarian carcinoma.
XX
OS Homo sapiens.
XX
PN US2003129192-A1.
XX
PD 10-JUL-2003.
XX
PF 02-AUG-2002; 2002US-00212677.
XX
PR 10-SEP-1999; 99US-00394374.
PR 01-MAY-2000; 2000US-00561778.
PR 15-AUG-2000; 2000US-00640173.
PR 07-SEP-2000; 2000US-00656668.
PR 14-NOV-2000; 2000US-00713550.
PR 03-APR-2001; 2001US-00825294.
PR 02-OCT-2001; 2001US-00970966.
XX
PA (CORI-) CORIXA CORP.
XX

PI Chenault RA, Xu J, Fanger GR, Harlocker SL, Mcneill PD;
XX
DR WPI; 2004-051070/05.
XX
PT New isolated polynucleotide encoding an ovarian tumor protein for use in
PT diagnosing, preventing or treating cancer, particularly ovarian cancer.
XX
PS Claim 1; SEQ ID NO 16; 220pp; English.
XX
CC The invention relates to an isolated polynucleotide. The invention is
CC used to diagnose, prevent or treat cancer, particularly ovarian cancer.
CC The present sequence represents a human ovarian carcinoma cDNA.
XX
SQ Sequence 396 BP; 69 A; 53 C; 56 G; 136 T; 0 U; 82 Other;

Query Match 3.1%; Score 68.4; DB 12; Length 396;
Best Local Similarity 63.6%; Pred. No. 5e-05;
Matches 84; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2111 CCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTC 2170
|| | || | ||| | ||| | | | ||||| || |
Db 179 CCNNANNNCCCCCNTTNTTTTTTTTTTTTTTTNCCCNNNNNTNTNANAAAAAANTTTNNNC 120

Qy 2171 TCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2230
|| | | |||||||||||||||||||||||||||||||||||||||||||||||||
Db 119 CCCCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

Qy 2231 AAAAAAAAAAAA 2242
||||||||||||
Db 59 AAAAAAAAAAAA 48

RESULT 189
ADI72227/c
ID ADI72227 standard; DNA; 647 BP.
XX
AC ADI72227;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #4969.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 4969; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-

```
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 647 BP; 160 A; 51 C; 82 G; 200 T; 0 U; 154 Other;

  Query Match             3.1%;  Score 68.4;  DB 5;  Length 647;
  Best Local Similarity   47.4%;  Pred. No. 5.9e-05;
  Matches  102;  Conservative    0;  Mismatches  113;  Indels    0;  Gaps    0;

Qy       2028 CTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTG 2087
                | ||  |     ||  ||  | |  | |||    |  |    ||
Db        271 CCCCCCCNNCNNAAAGTGGNTNGNGTTATCTGCTCTTTAAANTTATANNANNNCNNNNNN 212

Qy       2088 CTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTA 2147
                |    | |       |    |||                  |||     | |||  ||||
Db        211 TTAAAAAAANNNNNNNANANTATCNNGNNGNNNNNNNNNTTTTTTTTTTTTTTTTTTTT 152

Qy       2148 TCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAA 2207
                | |  |  | |||||     |                  ||||||||||||||||||||
Db        151 TNTNNTNNAAAAAAAGTNNNNTNNTTNTTNTNNAAAAAAAAAAAAAAAAAAAAAAAAAA 92

Qy       2208 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
                ||||||||||||||||||||||||||||||||||||
Db          91 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 57


RESULT 190
ADL37372/c
ID   ADL37372 standard; DNA; 647 BP.
XX
AC   ADL37372;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #11262.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 11262; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 647 BP; 160 A; 51 C; 82 G; 200 T; 0 U; 154 Other;

  Query Match             3.1%;  Score 68.4;  DB 5;  Length 647;
  Best Local Similarity   47.4%;  Pred. No. 5.9e-05;
  Matches  102;  Conservative    0;  Mismatches  113;  Indels    0;  Gaps    0;

Qy       2028 CTCCAACCTTGCAATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTG 2087
                | ||  |     ||  ||  | |  | |||    |  |    ||
Db        271 CCCCCCCNNCNNAAAGTGGNTNGNGTTATCTGCTCTTTAAANTTATANNANNNCNNNNNN 212

Qy       2088 CTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTA 2147
                |    | |       |    |||                  |||     | |||  ||||
Db        211 TTAAAAAAANNNNNNNANANTATCNNGNNGNNNNNNNNNTTTTTTTTTTTTTTTTTTTT 152

Qy       2148 TCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAA 2207
                | |  |  | |||||     |                  ||||||||||||||||||||
Db        151 TNTNNTNNAAAAAAAGTNNNNTNNTTNTTNTNNAAAAAAAAAAAAAAAAAAAAAAAAAA 92

Qy       2208 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
                ||||||||||||||||||||||||||||||||||||
```

```
Db         91 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 57


RESULT 191
AAV01527
ID   AAV01527 standard; cDNA to mRNA; 2239 BP.
XX
AC   AAV01527;
XX
DT   27-AUG-2003  (revised)
DT   21-MAY-1998  (first entry)
XX
DE   Wheat soluble starch synthase partial cDNA sequence.
XX
KW   Starch synthase; wheat; transgenic plant; ss.
XX
OS   Triticum aestivum.
XX
FH   Key             Location/Qualifiers
FT   CDS             3. .2018
FT                   /*tag=  a
XX
PN   WO9745545-A1.
XX
PD   04-DEC-1997.
XX
PF   28-MAY-1997;   97WO-EP002793.
XX
PR   29-MAY-1996;   96DE-01021588.
PR   11-SEP-1996;   96DE-01036917.
XX
PA   (AGRE ) HOECHST-SCHERING AGREVO GMBH.
XX
PI   Block M,  Loerz H,  Luetticke S,  Walter L,  Frohberg C,  Kossmann J;
XX
DR   WPI; 1998-032652/03.
DR   P-PSDB; AAW23937.
XX
PT   Nucleic acid encoding starch synthase enzymes from wheat - for transgenic
PT   plants that produce modified forms of starch, useful e.g. in foods, or
PT   for production of packaging materials and disposable goods.
XX
PS   Claim 1; Page 47-51; 71pp; English.
XX
CC   This near full-length cDNA clone, designated TaSSS, codes for a soluble
CC   starch synthase (see AAW23837) of summer wheat (cv. Florida). It was
CC   isolated from a phage cDNA library of 21-day-old wheat caryopses by
CC   screening with a PCR fragment derived from rice soluble starch synthase
CC   (see also AAV01529-30). A second clone (see AAV01528), coding for wheat
CC   granule-bound starch synthase (see AAW23938) is also claimed. These
CC   isolated nucleic acids can be inserted into vectors for production of
CC   transgenic plants, particularly starch-producing plants, specifically
CC   wheat. Use of the isolated nucleic acids, or of antisense sequences,
CC   allows starch metabolism to be regulated in transgenic plants.
CC   Overexpression may result in improved crop yield, while modification of
CC   starch in planta may eliminate the need for subsequent chemical/physical
CC   modification. Plants with altered levels of the various isoforms of
CC   starch synthase will produce starch of different chain length,
CC   amylose/amylopectin ratio, degree of branching, phosphate content,
CC   gelatinisation behaviour, granule size and shape, viscosity etc. The
CC   starch produced by such plants is useful particularly in foods or to
CC   produce packaging materials or disposable goods, as well as in any other
CC   known use of starch. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ   Sequence 2239 BP; 611 A; 448 C; 590 G; 590 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.4;  DB 2;  Length 2239;
  Best Local Similarity   78.6%;  Pred. No. 8.6e-05;
  Matches   81;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;

Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAA 2199
             | || || | || | |  ||||  |  ||| ||| ||  |  |    ||||||||||||||
Db       2110 TGCTGTTTTTTTTTAATCAAAAGAGGGGGTTTCCTCCGATTTCATTAAAAAAAAAAAAAA 2169

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||
Db       2170 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2212


RESULT 192
AAZ24487
ID   AAZ24487 standard; DNA; 2805 BP.
XX
AC   AAZ24487;
XX
DT   18-FEB-2000  (first entry)
XX
DE   Wheat soluble starch synthase DNA.
XX
KW   Soluble; starch synthase; wheat; transgenic plant; starch production;
KW   food; baking; pastry; packaging material; glucose; glucan; paper; pulp;
KW   adhesive; textile; building material; soil stabilizer; wetting agent;
KW   fertilizer; plant-protection; cosmetic; flocculant; ss.
XX
OS   Triticum aestivum.
XX
FH   Key             Location/Qualifiers
FT   CDS             314. .2584
FT                   /*tag=  a
FT                   /product= "soluble starch synthase"
XX
PN   DE19820607-A1.
XX
PD   11-NOV-1999.
XX
PF   08-MAY-1998;   98DE-01020607.
XX
PR   08-MAY-1998;   98DE-01020607.
XX
PA   (AGRE ) HOECHST-SCHERING AGREVO GMBH.
XX
PI   Loerz H,  Luetticke S,  Block M;
XX
DR   WPI; 2000-024508/03.
DR   P-PSDB; AAY50818.
XX
PT   New enzyme with starch synthase activity, useful for producing starch for
PT   foods and packaging materials.
XX
PS   Claim 1b; Page 15-19; 24pp; German.
XX
CC   This invention describes a novel protein (I) with the activity of wheat
CC   starch synthase. Transgenic plants, specifically wheat, that contain (I)
CC   are used for production of starch, used particularly in foods,
CC   particularly baked and pastry goods and for making packaging materials or
CC   disposable items. Starch may also be used as starting materials for
CC   glucose or glucan components (e.g. for fermentation or further chemical
CC   conversion); in paper and pulp production, as adhesives, in textiles, in
CC   preparation of gypsum-based building materials, as soil stabilizer, as
CC   wetting agent etc. in fertilizer and plant-protection compositions, as
CC   binder (in pharmaceuticals, cosmetics, coal briquetting and casting
CC   sand), as flocculant in soil or coal slurries, as rubber and leather
CC   additives, and for production of synthetic polymers, e.g. polyurethane
CC   films. Transgenic plants with increased/decreased production of (I)
CC   produce starches with altered physical and/or chemical properties such as
CC   amylose/amylopectin ratios, degree of branching, mean chain length,
CC   phosphate content, gelatinization properties, gel- or film-forming
CC   properties, or starch grain size or structure. This sequence encodes the
CC   soluble starch synthase isolated from wheat (Triticum aestivum L. cv.
CC   Florida)
XX
SQ   Sequence 2805 BP; 683 A; 703 C; 763 G; 656 T; 0 U; 0 Other;

  Query Match             3.1%;  Score 68.4;  DB 3;  Length 2805;
  Best Local Similarity   78.6%;  Pred. No. 9.3e-05;
  Matches   81;  Conservative    0;  Mismatches   22;  Indels    0;  Gaps    0;
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```
Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAA 2199
             | || || | || | |  |||| |  ||| ||| ||  | |    ||||||||||||
Db       2676 TGCTGTTTTTTTTTAATCAAAAGAGGGGGTTTCCTCCGATTTCATTAAAAAAAAAAAAA 2735

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||
Db       2736 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2778
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RESULT 193
ADD18806
ID ADD18806 standard; DNA; 3232 BP.
XX
AC ADD18806;
XX
DT 15-JAN-2004 (first entry)
XX
DE Human disease related protein DNA sequence SeqID238.
XX
KW human; disease state; cytostatic; antiinflammatory; ophthalmological;
KW antiarteriosclerotic; vulnerary; gene therapy;
KW hypoxia-regulated condition; tumourigenesis; angiogenesis; apoptosis;
KW inflammation; erythropoiesis; glycolysis; gluconeogenesis;
KW glucose transportation; catecholamine synthesis; iron transport;
KW nitric oxide synthesis; cancer; ischaemic condition; reperfusion injury;
KW retinopathy; neonatal stress; pre-eclampsia; atherosclerosis;
KW inflammatory condition; wound healing; gene; ds.
XX
OS Homo sapiens.
XX
PN WO2003018621-A2.
XX
PD 06-MAR-2003.
XX
PF 23-AUG-2002; 2002WO-GB003892.
XX
PR 23-AUG-2001; 2001GB-00020558.
PR 05-OCT-2001; 2001GB-00024037.
XX
PA (OXFO-) OXFORD BIOMEDICA UK LTD.
XX
PI Kingsman SM, White J, Ward NR, Harris RA, Naylor S, Mundy CR;
XX
DR WPI; 2003-290046/28.
DR P-PSDB; ADD18805.
XX
PT New substantially purified polypeptide, useful for diagnosing or treating
PT a hypoxia-regulated condition, such as cancer, ischemia, reperfusion
PT injury, retinopathy, pre-eclampsia, atherosclerosis, inflammation, or
PT wound healing.
XX
PS Claim 27; SEQ ID NO 238; 424pp; English.
XX
CC This invention relates to novel human genes and gene product which are
CC implicated in certain disease states. Compounds which modulate the
CC proteins of the invention may have cytostatic, antiinflammatory,
CC ophthalmological, antiarteriosclerotic or vulnerary activities. The
CC sequences of the invention may be useful for gene therapy. The invention
CC may be useful for diagnosing or treating a hypoxia-regulated condition,
CC such as tumourigenesis, angiogenesis, apoptosis, inflammation,
CC erythropoiesis, or the biological response to hypoxia conditions
CC including processes such as glycolysis, gluconeogenesis, glucose
CC transportation, catecholamine synthesis, iron transport or nitric oxide
CC synthesis. The disease includes cancer, ischaemic conditions, reperfusion
CC injury, retinopathy, neonatal stress, pre-eclampsia, atherosclerosis,
CC inflammatory conditions or wound healing. The present sequence is that of
CC a disease related protein encoding DNA sequence of the invention.
XX
SQ Sequence 3232 BP; 1025 A; 555 C; 700 G; 952 T; 0 U; 0 Other;

Query Match 3.1%; Score 68.4; DB 10; Length 3232;
Best Local Similarity 73.1%; Pred. No. 9.7e-05;

Matches 87; Conservative 0; Mismatches 32; Indels 0; Gaps 0;

```
Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              | ||| |   | | |    |||  | | |||||||| ||    | ||| ||       |
Db       3038 TAGCTCTGTGATTTTACTTTTTATTGTAATTAATAAACATTGAGATCTTCATTTTATACC 3097

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3098 TTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3156
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RESULT 194
ADI76313/c
ID ADI76313 standard; DNA; 327 BP.
XX
AC ADI76313;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #9055.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 9055; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The

CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 327 BP; 82 A; 24 C; 34 G; 128 T; 0 U; 59 Other;

Query Match 3.0%; Score 68.2; DB 5; Length 327;
Best Local Similarity 64.6%; Pred. No. 5.2e-05;
Matches 82; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

Qy 2116 GATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCAC 2175
Db 178 GNNCCCCCNNNNGGTTCCCCCNNTTTTTTNTCNNNTNTTNNNAAAANNTTTTTTNCCCCC 119

Qy 2176 CACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2235
Db 118 CAAAAAAAAAAAAAANAAANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 59

Qy 2236 AAAAAAA 2242
Db 58 AAAAAAA 52

RESULT 195
ADI69980/c
ID ADI69980 standard; DNA; 327 BP.
XX
AC ADI69980;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #2722.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 2722; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention.
XX
SQ Sequence 327 BP; 82 A; 24 C; 34 G; 128 T; 0 U; 59 Other;

Query Match 3.0%; Score 68.2; DB 5; Length 327;
Best Local Similarity 64.6%; Pred. No. 5.2e-05;
Matches 82; Conservative 0; Mismatches 45; Indels 0; Gaps 0;

Qy 2116 GATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCAC 2175
Db 178 GNNCCCCCNNNNGGTTCCCCCNNTTTTTTNTCNNNTNTTNNNAAAANNTTTTTTNCCCCC 119

Qy 2176 CACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2235
Db 118 CAAAAAAAAAAAAAANAAANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 59

Qy 2236 AAAAAAA 2242
Db 58 AAAAAAA 52

RESULT 196
ACN87667/c
ID ACN87667 standard; DNA; 617 BP.
XX
AC ACN87667;
XX
DT 02-DEC-2004 (first entry)
XX
DE Breast cancer related marker, seq id 8817.
XX
KW Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS Homo sapiens.
XX
PN US2003099974-A1.
XX
PD 29-MAY-2003.
XX
PF 18-JUL-2002; 2002US-00198846.
XX
PR 18-JUL-2001; 2001US-0306220P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX

DR WPI; 2003-787014/74.
XX
PT Novel isolated polypeptide associated with breast cancer, useful for
PT detecting presence of polypeptide in sample, as a marker for breast
PT cancer.
XX
PS Disclosure; SEQ ID NO 8817; 36pp; English.
XX
CC The invention relates to an isolated polypeptide (I) associated with
CC breast cancer which is encoded by a nucleic acid molecule comprising a
CC nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC the polypeptide of the invention. The activity of the polypeptide of the
CC invention may be described as cytostatic. The antibody is useful for
CC detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC invention are useful in the detection of breast tumours. (I) is useful as
CC a marker for breast cancer and in breast cancer therapy. Sequences given
CC in records ACN78851-ACN92934 represent nucleic acid markers associated
CC with breast cancer. Note: The sequence listing does not form part of the
CC specification but may be obtained in electronic format from the USPTO web
CC site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ Sequence 617 BP; 157 A; 69 C; 107 G; 169 T; 0 U; 115 Other;

Query Match 3.0%; Score 68.2; DB 11; Length 617;
Best Local Similarity 77.0%; Pred. No. 6.4e-05;
Matches 77; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy 2143 TTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAA 2202
Db 254 TTTTTTTTTTTTTTTTTNNNTTTTNNNCCCCCCCCNNNNNCCCCAAAAAAAAAAAAAAAAA 195

Qy 2203 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 194 AANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 155

RESULT 197
ADA20764
ID ADA20764 standard; cDNA; 2797 BP.
XX
AC ADA20764;
XX
DT 20-NOV-2003 (first entry)
XX
DE Soybean cDNA encoding a phospholipase D gamma #2.
XX
KW ss; gene; plant; respiratory burst oxidase; Rboh; tRNA-mnm-s-U-MT;
KW chromomethylase; cytosine 5-methyltransferase; phospholipase D;
KW transcription factor IIF; asparaginyl tRNA transferase;
KW glutaminyl tRNA transferase; EDS1; adaptin AP50; adaptin alpha;
KW adaptin betas; stress resistance; quality grain improvement; starch;
KW herbicide.
XX
OS Glycine max.
XX
PN US2003003471-A1.
XX
PD 02-JAN-2003.
XX
PF 19-FEB-2002; 2002US-00078770.
XX
PR 12-JUL-1999; 99US-0143400P.
PR 12-JUL-1999; 99US-0143409P.
PR 12-JUL-1999; 99US-0143410P.
PR 13-SEP-1999; 99US-0153534P.
PR 01-OCT-1999; 99US-0157401P.
PR 15-OCT-1999; 99US-0159878P.
PR 22-OCT-1999; 99US-0161223P.
PR 11-JUL-2000; 2000US-00614188.
XX
PA (FAMO/) FAMODU O O.
PA (MIAO/) MIAO G.
PA (SIMM/) SIMMONS C R.
PA (WENG/) WENG Z.
PA (CAHO/) CAHOON R E.
PA (SAKA/) SAKAI H.
PA (QUNZ/) QUN Z.
PA (THOR/) THORPE C J.
PA (FADE/) FADER G M.
PA (LIBB/) LI B.
XX
PI Famodu OO, Miao G, Simmons CR, Weng Z, Cahoon RE, Sakai H;
PI Qun Z, Thorpe CJ, Fader GM, Li B;
XX
DR WPI; 2003-311885/30.
DR P-PSDB; ADA20765.
XX
PT New phospholipase D polypeptides and polynucleotides, useful for
PT genetically and physically mapping the genes that they are part of, and
PT subsequently in plant breeding for developing lines with the desired
PT phenotypes.
XX
PS Claim 3; Page 130-132; 189pp; English.
XX
CC The invention relates to an isolated polynucleotide encoding a
CC phospholipase D comprising a nucleotide sequence (encoding a polypeptide
CC of at least 80 amino acids having at least 92% identity based on the
CC Clustal method of alignment when compared to the proteins appearing as ID
CC 120-134 (even numbers) or their complements. Also included are
CC nucleotides encoding 98 plant proteins (comprising respiratory burst
CC oxidases (Rboh), tRNA-mnm-s-U-MT, chromomethylases, cytosine 5-
CC methyltransferases, phospholipase D, transcription factor IIF,
CC asparaginyl tRNA transferases, glutaminyl tRNA transferases, EDS1 (not
CC defined), adaptin AP50, adaptin alphas and adaptin betas), chimaeric
CC genes, host cells comprising the chimaeras, a virus comprising the gene,
CC the encoded phospholipase D proteins, a method of selecting an isolated
CC polynucleotide that affects the level of expression of a phospholipase D
CC polypeptide in a plant cell, a method of obtaining a nucleic acid
CC fragment encoding a phospholipase D polypeptide, a method for positive
CC selection of a transformed cell and a method of altering the level of
CC expression of a phospholipase D in a host cell. The polynucleotides may
CC be used as probes for genetically and physically mapping the genes that
CC they are part of, and as markers for traits linked to those genes. Such
CC information may be used in plant breeding to develop lines with the
CC desired phenotypes. The nucleic acids are useful in creating transgenic
CC plants in which the polypeptides are present at higher or lower levels
CC than normal, in cell types or developmental stages in which they are not
CC normally found, and which would alter the level of stress and disease
CC resistance, enhancement of gene expression or transcription, quality
CC grain improvement, or generation of novel starches in those cells. The
CC polypeptides can be used as a target to facilitate design and/or
CC identification of inhibitors of those enzymes that may be useful as
CC herbicides. The present sequence is a cDNA encoding one of the 98
CC proteins of the invention.
XX
SQ Sequence 2797 BP; 935 A; 498 C; 617 G; 747 T; 0 U; 0 Other;

Query Match 3.0%; Score 68.2; DB 10; Length 2797;
Best Local Similarity 58.4%; Pred. No. 0.0001;
Matches 118; Conservative 0; Mismatches 84; Indels 0; Gaps 0;

Qy 2041 ATTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATA 2100
Db 2567 ATTTTAGTAGCTTATTTACAATATTTAGATTCTTTTGGAAAAGAAAAGAAAAGGAGTATA 2626

Qy 2101 ATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAA 2160
Db 2627 AAGATTTGAACTTGTAACCTGCTTTGAAGTACTAGTTTACTCAATGTCTTATTTAAGATT 2686

Qy 2161 AATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2220
Db 2687 TAAGGTAGTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2746

Qy 2221 AAAAAAAAAAAAAAAAAAAAA 2242
Db 2747 AAAAAAAAAAAAAAAAAAAAA 2768

```
RESULT 198
AAI84805
ID   AAI84805 standard; cDNA; 402 BP.
XX
AC   AAI84805;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 4865.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO04874.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 1; SEQ ID NO 4865; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 402 BP; 191 A; 85 C; 56 G; 69 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 68;  DB 4;  Length 402;
  Best Local Similarity   82.8%;  Pred. No. 6.2e-05;
  Matches   77;  Conservative    0;  Mismatches   16;  Indels    0;  Gaps    0;

Qy       2150 TTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAA 2209
             ||||||| |||   ||| ||| | ||| |    ||||||||||||||||||||
Db         67 TTATTAAATAAACATTTGTTCTGAAAAACTCCCAAAAAAAAAAAAAAAAAAAAAAAAAA 126

Qy       2210 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             |||||||||||||||||||||||||||||||||
Db        127 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 159


RESULT 199
ACN56273/c
ID   ACN56273 standard; cDNA; 517 BP.
XX
AC   ACN56273;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-033-Q6-N6-E7, SEQ:11054.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 11054; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 517 BP; 234 A; 0 C; 43 G; 238 T; 0 U; 2 Other;

  Query Match             3.0%;  Score 68;  DB 13;  Length 517;
  Best Local Similarity   69.2%;  Pred. No. 6.7e-05;
  Matches   92;  Conservative    0;  Mismatches   41;  Indels    0;  Gaps    0;
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Qy       2110 TCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGT 2169
              |||  |   | || ||  ||||  |    ||    |||| || ||   ||||| ||  |
Db        229 TCCCTTTCCCTCCCTTTTTTTAAAAAAATTTAAATTATTTTTTTTTAAAAAATTTTAAT 170

Qy       2170 CTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2229
              |  |  |          |||||||||||||||||||||||||||||||||||||||||||
Db        169 ATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 110

Qy       2230 AAAAAAAAAAAAA 2242
              |||||||||||||
Db        109 AAAAAAAAAAAAA 97
```

RESULT 200
ACN52303
ID ACN52303 standard; cDNA; 549 BP.
XX
AC ACN52303;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-014-Q1-K6-F6, SEQ:7084.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 7084; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 549 BP; 247 A; 59 C; 86 G; 148 T; 0 U; 9 Other;

Query Match 3.0%; Score 68; DB 13; Length 549;
Best Local Similarity 66.9%; Pred. No. 6.8e-05;
Matches 95; Conservative 0; Mismatches 47; Indels 0; Gaps 0;

```
Qy       2101 ATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAA 2160
              || |||| ||   ||  |    ||  |||||  ||| |||   ||   |  | |  |
Db        347 ATAATTCTATGTCATTTTGTTGTTGACTTTATGACTGTTTATATTATGCAAAATGTTTCT 406

Qy       2161 AATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2220
                |  |||| | || |          |||||||||||||||||||||||||||||||||||
Db        407 GTTAATGGTTTTCAACTAANAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 466

Qy       2221 AAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||
Db        467 AAAAAAAAAAAAAAAAAAAAA 488
```

RESULT 201
ABL86758/c
ID ABL86758 standard; cDNA; 636 BP.
XX
AC ABL86758;
XX
DT 17-MAY-2002 (first entry)
XX
DE Human ovarian cancer related cDNA clone SEQ ID NO:9736.
XX
KW Human; ovarian cancer; ovarian tumour; cytostatic; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200192581-A2.
XX
PD 06-DEC-2001.
XX
PF 29-MAY-2001; 2001WO-US017756.
XX
PR 26-MAY-2000; 2000US-0207484P.
XX
PA (CORI-) CORIXA CORP.
XX
PI Algate PA, Harlocker SL, Jones R;
XX
DR WPI; 2002-122075/16.
XX
PT Composition for therapy and diagnosis of ovarian cancer comprising
PT polypeptide of a ovarian tumor polypeptide, polynucleotide encoding
PT polypeptide, antibody specific to polypeptide or T cell expressing
PT polypeptide.
XX
PS Claim 1; SEQ ID NO 9736; 489pp; English.
XX
CC The present invention describes a composition (I) comprising: carriers
CC and immunostimulants; and a polypeptide (II) of a ovarian tumour
CC polypeptide encoded by a polynucleotide (III) having a cDNA sequence (S1)
CC from the 10912 nucleotide sequences as given in ABL77023 to ABL87934,
CC (III) encoding (II) having a sequence (S2), a T cell population of (II),
CC or antigen presenting cells that express (II). (I) has cytostatic

```
CC   activity. An oligonucleotide (IV) that hybridises to (S1) can be used for
CC   detecting ovarian cancer in a patient's biological sample preferably
CC   serum or ovarian tissue. The method comprises contacting a biological
CC   sample from a patient with (IV), detecting the amount of polynucleotide
CC   hybridising to (IV) and comparing the amount to a predetermined cutoff
CC   value and thereby detecting ovarian cancer in the patient, where the
CC   amount of polynucleotide hybridising to (IV) is detected preferably by
CC   polymerase chain reaction (PCR). (I) comprising (III) and/or (II) is
CC   useful for stimulating and/or expanding T cells specific for an ovarian
CC   tumour protein comprising contacting T cells with (III) or (II). (III) is
CC   useful in design and preparation of ribozyme molecules for inhibiting
CC   expression of the tumour polypeptides and proteins in tumour cells; and
CC   to isolate a full length gene from a suitable library e.g., a tumour cDNA
CC   library using well known techniques
XX
SQ   Sequence 636 BP; 152 A; 131 C; 121 G; 230 T; 0 U; 2 Other;

  Query Match             3.0%;  Score 68;  DB 6;  Length 636;
  Best Local Similarity   76.1%;  Pred. No. 7.1e-05;
  Matches   83;  Conservative    0;  Mismatches   26;  Indels    0;  Gaps    0;

Qy       2134 ACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAA 2193
              | | |||  |||| | |||  || |||  | |||| ||   |   |        |||||||
Db        117 ATTTTTTTTTTTTTTTTTAAAAAAAAACCTTTTGGCCTTTCCTTTTCTGGGGAAAAAAAA 58

Qy       2194 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db         57 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 9


RESULT 202
AAD42252
ID   AAD42252 standard; cDNA; 850 BP.
XX
AC   AAD42252;
XX
DT   04-NOV-2002  (first entry)
XX
DE   Soybean FT homologue cDNA #1.
XX
KW   Floral developmental protein; flowering locus T; APETALA3; transgenic;
KW   FT; AP3; transgenic plant; fertility; flower development; gene mapping;
KW   sterility; plant growth; inflorescence architecture; plant morphology;
KW   tissue culture; cell division; soybean; gene; ss.
XX
OS   Glycine max.
XX
FH   Key             Location/Qualifiers
FT   CDS             1. .519
FT                   /*tag=  a
FT                   /product= "Soybean FT homologue protein"
XX
PN   WO200244390-A2.
XX
PD   06-JUN-2002.
XX
PF   21-NOV-2001; 2001WO-US043750.
XX
PR   28-NOV-2000; 2000US-0253415P.
XX
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Cahoon EB,  Cahoon RE,  Klein TM,  Rafalski AJ,  Sakai H;
XX
DR   WPI; 2002-547703/58.
DR   P-PSDB; AAE25750.
XX
PT   New floral developmental polypeptide having flowering locus T or Ap3
PT   homolog activity, useful for immunological screening of cDNA expression
PT   libraries.
XX
PS   Claim 6; Page 72; 88pp; English.
XX
CC   The present invention relates to novel floral developmental proteins,
CC   more specifically flowering locus T (FT) or APETALA3 (AP3) homologue
CC   proteins and polynucleotides encoding such proteins. Floral developmental
CC   polynucleotides are useful for transforming cells or for producing plants
CC   by transforming the plant cells with the polynucleotides and regenerating
CC   the plants from the transformed plant cells. Sequences of the invention
CC   are useful for immunological screening of cDNA expression libraries. They
CC   are also useful for creating transgenic plants. Polynucleotides of the
CC   invention are used as probes for genetically and physically mapping the
CC   genes that they are a part of and as markers for traits linked to those
CC   genes. AP3 homologues may be useful for engineering plant sterility or
CC   fertility, flower development and morphology. FT or TFL1 homologues are
CC   useful for engineering flowering time, plant growth rate, inflorescence
CC   architecture, tissue culture morphology and rate of cell division to
CC   enhance transformation. The present sequence is soybean FT homologue cDNA
CC   from a contig of clones se3.pk0036.g4 and se6.pk0039.h6
XX
SQ   Sequence 850 BP; 292 A; 176 C; 159 G; 223 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 68;  DB 6;  Length 850;
  Best Local Similarity   71.2%;  Pred. No. 7.8e-05;
  Matches   89;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy       2118 TCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCA 2177
              || |  |   | |||| |||||||  | ||||  ||  |||||  |  |  |    |  |
Db        711 TCTCTATATATATACCTCTCTTTCACTCTATCAAATATATAAAGTTAATCTTTATTAAAA 770

Qy       2178 CTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2237
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        771 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 830

Qy       2238 AAAAA 2242
              |||||
Db        831 AAAAA 835


RESULT 203
ADR04268
ID   ADR04268 standard; cDNA; 850 BP.
XX
AC   ADR04268;
XX
DT   04-NOV-2004  (first entry)
XX
DE   Soybean FT homologue encoding cDNA SEQ ID NO:35.
XX
KW   flowering locus T gene; FT; terminal flower; TFL; Apetala3; Ap3; plant;
KW   floral development; plant sterility; plant fertility; flowering time;
KW   plant growth rate; inflorescence architecture; tissue culture morphology;
KW   cell division; FT homologue; gene; ss.
XX
OS   Glycine max.
XX
FH   Key             Location/Qualifiers
FT   CDS             1. .519
FT                   /*tag=  a
FT                   /product= "flowering locus T (FT) homologue"
XX
PN   WO2004067723-A2.
XX
PD   12-AUG-2004.
XX
PF   29-JAN-2004; 2004WO-US002422.
XX
PR   30-JAN-2003; 2003US-00343477.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
PA   (DUPO ) DU PONT DE NEMOURS & CO E I.
XX
PI   Danilevskaya O,  Hermon P,  Bruggemann E,  Shirbroun D,  Ananiev E;
PI   Rafalski JA,  Sakai H,  Cahoon E,  Cahoon R,  Klein T;
XX
DR   WPI; 2004-580996/56.
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DR   P-PSDB; ADR04269.
XX
PT   New polynucleotides, specifically nucleic acid fragments encoding
PT   flowering locus T gene (FT) or terminal flower (TFL), or Apetala3 (Ap3)
PT   homologs, useful for floral development, e.g. engineering plant flowering
PT   time.
XX
PS   Disclosure; SEQ ID NO 35; 109pp; English.
XX
CC   The present invention describes an isolated polynucleotide comprising a
CC   first, second, third, fourth or fifth nucleotide sequence, or their
CC   complement encoding a polypeptide either having flowering locus T gene
CC   (FT), terminal flower (TFL), or Apetala3 (Ap3) homologue activity. Also
CC   described: (1) a vector comprising the polynucleotide; (2) a recombinant
CC   DNA construct comprising the polynucleotide; (3) transforming a cell by
CC   transforming a cell with the polynucleotide; (4) a cell comprising the
CC   recombinant DNA construct; (5) producing a plant comprising transforming
CC   a plant cell with the polynucleotide, and regenerating a plant from the
CC   transformed plant cell; (6) a plant comprising the recombinant DNA
CC   construct; (7) a seed comprising the recombinant DNA construct; (8) an
CC   isolated polynucleotide comprising a first nucleotide sequence, where the
CC   first nucleotide sequence contains at least 30 nucleotides, and where the
CC   first nucleotide sequence is comprised by another polynucleotide, where
CC   the other polynucleotide includes the second, third, fourth, fifth or
CC   sixth nucleotide sequence; (9) an isolated polypeptide having FT or Ap3
CC   homologue activity, as described above; and (10) isolating a polypeptide
CC   encoded by the polynucleotide comprising isolating the polypeptide from a
CC   cell containing a recombinant DNA construct comprising the polynucleotide
CC   operably linked to a regulatory sequence. The polynucleotides are useful
CC   for floral development, e.g. engineering plant sterility/fertility,
CC   flowering time, plant growth rate, inflorescence architecture, and tissue
CC   culture morphology and the rate of cell division to enhance
CC   transformation. The present sequence encodes an FT homologue from the
CC   present invention.
XX
SQ   Sequence 850 BP; 292 A; 176 C; 159 G; 223 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 68; DB 13;  Length 850;
  Best Local Similarity   71.2%;  Pred. No. 7.8e-05;
  Matches   89;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy       2118 TCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCA 2177
             || |  |   | |||| |||||||  | ||||  ||  |||||  |  |  |     |  |
Db        711 TCTCTATATATATACCTCTCTTTCACTCTATCAAATATATAAAGTTAATCTTTATTAAAA 770

Qy       2178 CTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2237
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        771 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 830

Qy       2238 AAAAA 2242
                |||||
Db        831 AAAAA 835


RESULT 204
AAZ90632
ID   AAZ90632 standard; DNA; 1690 BP.
XX
AC   AAZ90632;
XX
DT   13-JUN-2000  (first entry)
XX
DE   Human adipose tissue protein #2 encoding DNA.
XX
KW   Adipose tissue; obesity; diabetes; hyperlipemia; hypertension; human;
KW   arteriosclerosis; hyperuricemia; sleep apnea syndrome; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   5'UTR           1. .129
FT                   /*tag=  a
FT   CDS             130. .1224
FT                   /*tag=  b
FT   3'UTR           1225. .1690
FT                   /*tag=  c
XX
PN   JP2000037190-A.
XX
PD   08-FEB-2000.
XX
PF   23-JUL-1998;   98JP-00225228.
XX
PR   23-JUL-1998;   98JP-00225228.
XX
PA   (NISB ) JAPAN TOBACCO INC.
XX
DR   WPI; 2000-306578/27.
DR   P-PSDB; AAY67599.
XX
PT   A physiologically active protein specifically derived from mammal tissue.
XX
PS   Claim 16; Page 29-31; 50pp; Japanese.
XX
CC   The invention relates to identification of genes and proteins of adipose
CC   tissue relating to obesity, particularly complications of visceral
CC   obesity including diabetes, hyperlipemia, hypertension, arteriosclerosis,
CC   hyperuricemia and sleep apnea syndrome. The genes (AAZ90631-633) and the
CC   proteins (AAY67598-Y67600) are used in the genetic diagnosis, prevention
CC   and treatment of adipose tissue related diseases
XX
SQ   Sequence 1690 BP; 345 A; 578 C; 489 G; 278 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 68;  DB 3;  Length 1690;
  Best Local Similarity   65.8%;  Pred. No. 9.7e-05;
  Matches   98;  Conservative    0;  Mismatches   51;  Indels    0;  Gaps    0;

Qy       2094 ACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTAT 2153
             || |||   ||||   |  |||     ||  |  | || || | || |  ||| | |||
Db       1497 ACCCATCTGCATTGTTTTAATTCCTTCCGGTTTTCTATCAATGTTACAGTTTTTTTTAA 1556

Qy       2154 TAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2213
             |||   || |  |   ||   |          ||||||||||||||||||||||||||
Db       1557 TAAAGCAAGTTATTCATTCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1616

Qy       2214 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             |||||||||||||||||||||||||||||
Db       1617 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1645


RESULT 205
ADL08408
ID   ADL08408 standard; DNA; 4130 BP.
XX
AC   ADL08408;
XX
DT   06-MAY-2004  (first entry)
XX
DE   Human cancer suppressor gene PP14434.
XX
KW   ds; gene; cancer suppressor; cancer.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             483. .1181
FT                   /*tag=  a
XX
PN   CN1403479-A.
XX
PD   19-MAR-2003.
XX
PF   12-SEP-2001; 2001CN-00126727.
XX
PR   12-SEP-2001; 2001CN-00126727.
XX
```

```
PA   (SHAN-) SHANGHAI XINSHIJIE GENE TECHN DEV CO LTD.
XX
PI   Gu J,  Yang S;
XX
DR   WPI; 2003-494228/47.
DR   P-PSDB; ADL08407.
XX
PT   Human protein with function of suppressing cancer cell growth and its
PT   coding sequence.
XX
PS   Claim 5; SEQ ID NO 15; 42pp; Chinese.
XX
CC   The invention discloses one kind of human protein with cancer suppressing
CC   function, polynucleotides encoding the polypeptide and the recombinant
CC   process of producing the polypeptide. The polypeptide can be used in
CC   treating various diseases, such as cancer. The present invention also
CC   discloses the agonist resisting the polypeptide and its treatment effect.
CC   This sequence represents the gene encoding one of the cancer suppressing
CC   proteins.
XX
SQ   Sequence 4130 BP; 981 A; 1329 C; 1013 G; 807 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 68;  DB 10;  Length 4130;
  Best Local Similarity   79.2%;  Pred. No. 0.00013;
  Matches   80;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy       2142 CTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAA 2201
             ||  |||| |   ||  |||||||| ||||   | |     |  ||||||||||||||| 
Db       4015 CTCCTATCATGAAAAATAAAATGTTTGTCTTTGCAAAACAGTAAAAAAAAAAAAAAAAAA 4074

Qy       2202 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||| 
Db       4075 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4115


RESULT 206
ABV44994/c
ID   ABV44994 standard; cDNA; 309 BP.
XX
AC   ABV44994;
XX
DT   16-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 44985.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 8916; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 309 BP; 188 A; 13 C; 11 G; 97 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.8;  DB 5;  Length 309;
  Best Local Similarity   72.5%;  Pred. No. 6.3e-05;
  Matches   87;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
             |||  |||  ||   |||  |||| | || ||| | ||  | ||  | |     | |
Db        162 TTTTTTTTTTCAAAATTTTTTTTTTTTTTTTTATTTAATTTTTTTTTTATAATATATTAAA 103

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        102 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 43


RESULT 207
ACN61822/c
ID   ACN61822 standard; cDNA; 420 BP.
XX
AC   ACN61822;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-021-Q6-N6-E1, SEQ:16603.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 16603; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
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CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 420 BP; 186 A; 13 C; 91 G; 129 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 67.8;  DB 13;  Length 420;
  Best Local Similarity   66.7%;  Pred. No. 6.9e-05;
  Matches   96;  Conservative    0;  Mismatches   48;  Indels    0;  Gaps    0;

Qy       2099 TAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATA 2158
              | ||  ||   |  |||   |   ||  |  | ||   |   ||   || |||| ||| |
Db        168 TCATTCTTAATTAAAATTTACAATTTAACAGTTCCCACCCCCCCCCCTAACTTAATAAAA 109

Qy       2159 AAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2218
              |||||     |   | ||||   |     ||||||||||||||||||||||||||||||
Db        108 AAAATAAATTTAAACCCCACCCCCATATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 49

Qy       2219 AAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||
Db         48 AAAAAAAAAAAAAAAAAAAAAAA 25


RESULT 208
ABV56874
ID   ABV56874 standard; cDNA; 429 BP.
XX
AC   ABV56874;
XX
DT   17-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 56865.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 10957; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 429 BP; 193 A; 77 C; 60 G; 99 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.8;  DB 5;  Length 429;
  Best Local Similarity   72.5%;  Pred. No. 7e-05;
  Matches   87;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
              |||  ||||     |  |||||||||| |  | |||||  |  |    | |    | |
Db        220 TTTTTTTTAAATATACTTCCTTTTATGTGTTCAATAATTAAATGCCTTTGGGTCCTTCAA 279

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        280 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 339


RESULT 209
ACN51258/c
ID   ACN51258 standard; cDNA; 554 BP.
XX
AC   ACN51258;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-013-Q1-N6-B2, SEQ:6039.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
```

PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 6039; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 554 BP; 292 A; 15 C; 134 G; 113 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.8; DB 13; Length 554;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 146 TTTTTTTTTTATTTTTTTTTTTATTTTTTAAAATAAAATTTTAAAAAAAATTTTATT 87

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 86 ATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 27

RESULT 210
ABV40163
ID ABV40163 standard; cDNA; 556 BP.
XX
AC ABV40163;
XX
DT 16-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 40154.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 8115; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 556 BP; 389 A; 1 C; 51 G; 113 T; 0 U; 2 Other;

Query Match 3.0%; Score 67.8; DB 5; Length 556;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 40 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAATTTTTTTTTTTTAATTAAA 99

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 100 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 159

RESULT 211
ABV40063
ID ABV40063 standard; cDNA; 556 BP.
XX
AC ABV40063;
XX
DT 16-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 40054.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX

PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 8100; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 556 BP; 389 A; 1 C; 51 G; 113 T; 0 U; 2 Other;

Query Match 3.0%; Score 67.8; DB 5; Length 556;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 40 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAATTTTTTTTTTTTAATTAAA 99

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 100 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 159

RESULT 212
ABV42105
ID ABV42105 standard; cDNA; 556 BP.
XX
AC ABV42105;
XX
DT 16-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 42096.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 8441; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 556 BP; 389 A; 1 C; 51 G; 113 T; 0 U; 2 Other;

Query Match 3.0%; Score 67.8; DB 5; Length 556;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 40 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAATTTTTTTTTTTTAATTAAA 99

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 100 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 159

RESULT 213
ABV43601
ID ABV43601 standard; cDNA; 556 BP.
XX
AC ABV43601;
XX
DT 16-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 43592.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;

XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 8681-8682; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 556 BP; 389 A; 1 C; 51 G; 113 T; 0 U; 2 Other;

Query Match 3.0%; Score 67.8; DB 5; Length 556;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 40 TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAAAATTTTTTTTTTTTTAATTAAA 99

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 100 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 159

RESULT 214
ACN56366/c
ID ACN56366 standard; cDNA; 574 BP.
XX
AC ACN56366;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-034-Q6-N6-D1, SEQ:11147.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 11147; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 574 BP; 226 A; 0 C; 111 G; 223 T; 0 U; 14 Other;

Query Match 3.0%; Score 67.8; DB 13; Length 574;
Best Local Similarity 72.5%; Pred. No. 7.6e-05;
Matches 87; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

Qy 2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
Db 236 TTTTTTTTAAAAAACTTTTTTTTTTTTTTTTTTAAAATTTTTTTAATATTTCTTTTTTTT 177

Qy 2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 176 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 117

RESULT 215
ACN46068/c
ID ACN46068 standard; cDNA; 588 BP.
XX
AC ACN46068;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton primed seed EST Clone ID: LIB3825-014-Q1-N6-E3, SEQ:849.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW variety DP50B; library LIB3825; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.

```
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 849; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety DP50B primed seed cDNA library (LIB3825). The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format directly from the US patent office at
CC   seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 588 BP; 258 A; 82 C; 156 G; 92 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.8;  DB 13;  Length 588;
  Best Local Similarity   72.5%;  Pred. No. 7.7e-05;
  Matches   87;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
             |||  |   ||  | |||  |||| | || ||  |     | ||  |   | || ||
Db        139 TTTTTTGGGCCCGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTAACCCCCCTAAT 80

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         79 TCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 20


RESULT 216
ADR63575
ID   ADR63575 standard; cDNA; 690 BP.
XX
AC   ADR63575;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton cDNA sequence, SEQ ID 4356.
XX
KW   Cotton; ss; plant; cold tolerance; growth rate; cell cycle pathway;
KW   drought tolerance; plant disease resistance; galactomannan; lignin;
KW   plant growth regulator; heat tolerance; herbicide tolerance;
KW   homologous recombination; extreme osmotic condition tolerance;
KW   pathogen resistance; pest resistance; yield; photosynthesis; seed oil;
KW   stress resistance.
XX
OS   Gossypium hirsutum.
XX
PN   US2004181830-A1.
XX
PD   16-SEP-2004.
XX
PF   29-JAN-2004; 2004US-00767795.
XX
PR   07-MAY-2001; 2001US-00849529.
PR   12-DEC-2001; 2001US-00021323.
XX
PA   (KOVA/) KOVALIC D K.
PA   (ZHOU/) ZHOU Y.
PA   (CAOY/) CAO Y.
XX
PI   Kovalic DK,  Zhou Y,  Cao Y;
XX
DR   WPI; 2004-667718/65.
XX
PT   New recombinant nucleic acid molecules and polypeptides from Gossypium
PT   hirsutum, useful for producing plants with improved biological
PT   characteristics (e.g. improved plant cold or drought tolerance).
XX
PS   Claim 1; SEQ ID NO 4356; 14pp; English.
XX
CC   The invention relates to a recombinant polynucleotide comprising any of
CC   the 58798 Cotton plant cDNA sequences mentioned in the specification.
CC   Also a recombinant polypeptide comprising any of the 58798 amino acid
CC   sequences mentioned in the specification and producing a plant having an
CC   improved property. Producing a plant having an improved property
CC   comprises transforming a plant with a recombinant construct comprising a
CC   promoter region functional in a plant cell operably joined to a
CC   polynucleotide comprising a coding sequence for a polypeptide associated
CC   with the property, and growing the transformed plant. The polypeptide is
CC   useful for improving plant cold tolerance, manipulating growth rate in
CC   plant cells by modification of the cell cycle pathway, improving plant
CC   drought tolerance, providing increased resistance to plant disease,
CC   producing galactomannan (or lignin or plant growth regulators), improving
CC   plant heat tolerance, improving plant tolerance to herbicides, increasing
CC   the rate of homologous recombination in plants, improving plant tolerance
CC   to extreme osmotic conditions or to pathogens or pests, improving yield
CC   by modification of photosynthesis, modifying seed oil or protein yield
CC   and/or content, improving yield by modification of carbohydrate, nitrogen
CC   or phosphorus use and/or uptake, or improving yield by providing improved
CC   plant growth and development under at least one stress condition. The
CC   polynucleotide and polypeptide may also be used in recombinant DNA
CC   constructs, in physical arrays of molecules, as plant breeding markers,
CC   or in computer-based storage and analysis systems. The present sequence
CC   is a Cotton plant cDNA of the invention. NOTE: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20040181830. However only 6585
CC   polynucleotide sequences were available, the remaining 52213
CC   polynucleotides and all 58798 protein sequences were not present.
XX
SQ   Sequence 690 BP; 264 A; 102 C; 129 G; 195 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.8;  DB 13;  Length 690;
  Best Local Similarity   72.5%;  Pred. No. 8.1e-05;
  Matches   87;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
             ||  | ||  |  || |   | |  || |    | ||  ||||  | || |||    |
Db        468 TTATCCTTCCTTCTTTGATCCTCCATGTATGAACTATTAATGGAGTTCCCCAATTTTTGT 527
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Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              || ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        528 TCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 587
```

RESULT 217
AAS27002
ID AAS27002 standard; cDNA; 810 BP.
XX
AC AAS27002;
XX
DT 07-NOV-2001 (first entry)
XX
DE cDNA encoding novel signal transduction pathway protein, Seq ID 37.
XX
KW Neuroprotective; cytostatic; dermatological; immunosuppressive; tumour;
KW antiinflammatory; anti-HIV; antibacterial; antiinflammatory; cancer;
KW immune system disorder; rheumatoid arthritis; inflammatory condition;
KW organ transplant rejection; infection; hepatitis C; blood disorder;
KW sickle cell anaemia; hyperproliferative disorder; Gaucher's disease;
KW neurodegenerative disorder; Alzheimer's disease; Parkinson's disease;
KW chromosomal abnormality; Down syndrome; ischaemia; renal disorder;
KW cardiovascular; respiratory; wound healing; endocrine; Addison's disease;
KW reproductive system; gastrointestinal; liver disorder; AIDS; ss;
KW acquired immune deficiency syndrome.
XX
OS Homo sapiens.
XX
PN WO200154733-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001312.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.

PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-465460/50.
DR P-PSDB; AAU17085.
XX
PT Novel polypeptides useful for diagnosing, treating, preventing and/or
PT prognosing disorders related to the proteins, including cancers, immune
PT disorders and neuronal disorders.
XX
PS Claim 1; SEQ ID NO 37; 880pp; English.
XX
CC The invention relates to novel isolated polypeptides (I), and
CC polynucleotides (II). (I), (II) and the antibody to (I) are useful for
CC diagnosing, preventing and treating diseases including immune system
CC disorders (e.g. congenital and acquired immunodeficiencies, autoimmune
CC disorders (e.g rheumatoid arthritis), inflammatory conditions, organ
CC transplant rejections and graft versus host disease, infectious diseases
CC (e.g. hepatitis C), bleeding disorders, haemoglobin abnormalities and
CC other blood-related disorders (sickle cell anaemia), myeloproliferative
CC disorders, primary haematopoietic disorders, hyperproliferative disorders
CC (e.g. Gaucher's disease and cancer), neurodegenerative disorders (e.g.
CC Alzheimer's disease, Parkinson's disease), chromosomal abnormalities
CC (Down syndrome), ischaemic injury (e.g. stroke), renal disorders (e.g.
CC glomerulonephritis), cardiovascular disorders (e.g. arrhythmia),
CC respiratory disorders, dermatological disorders, in wound healing,
CC epithelial cell proliferation, endocrine disorders (e.g. Addison's
CC disease), reproductive system disorders, gastrointestinal disorder
CC (inflammatory disorders), liver disorders (cirrhosis), as stimulators of
CC B-cell responsiveness to pathogens, activators of T-cells, to induce
CC higher affinity antibodies, and as a means to induce tumour proliferation
CC in pathologies e.g. acquired immune deficiency syndrome (AIDS). AAS26976-
CC AAS27850 represent novel signal transduction pathway protein coding
CC sequences and PCR primers of the invention
XX

Query Match 3.0%; Score 67.8; DB 4; Length 810;
Best Local Similarity 85.2%; Pred. No. 8.5e-05;
Matches 75; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

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Qy       2155 AATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2214
             |||| |  |||||| |||| |     |||  ||||||||||||||||||||||||||||
Db        714 AATACAGTTGTTGGCCTCCGGCCTCCCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 773

Qy       2215 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||
```

Db 774 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 801

RESULT 218
ADB93180
ID ADB93180 standard; cDNA; 810 BP.
XX
AC ADB93180;
XX
DT 04-DEC-2003 (first entry)
XX
DE Human cDNA encoding a novel protein #27.
XX
KW ss; gene; human; autoimmune disease; Parkinson's disease; silicosis;
KW gastrointestinal disease; atherosclerosis; haemophilia; thrombocytopenia;
KW immunosuppressive agent; adjuvant; enhance immune response;
KW higher affinity antibody induction;
KW increased serum immunoglobulin concentration.
XX
OS Homo sapiens.
XX
PN US2002168711-A1.
XX
PD 14-NOV-2002.
XX
PF 17-JAN-2001; 2001US-00764868.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 28-JUN-2000; 2000US-0214886P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 22-AUG-2000; 2000US-0226868P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 08-SEP-2000; 2000US-0231413P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 27-SEP-2000; 2000US-0235834P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241809P.
PR 01-NOV-2000; 2000US-0244617P.

```
PR   17-NOV-2000; 2000US-0249299P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
XX
PA   (ROSE/) ROSEN C A.
PA   (RUBE/) RUBEN S M.
PA   (BARA/) BARASH S C.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2003-719985/68.
DR   P-PSDB; ADB93793.
XX
PT   New isolated polypeptide useful for diagnosing and treating
PT   immunosuppressive conditions such as autoimmune disease and Parkinson's
PT   disease.
XX
PS   Claim 3; SEQ ID NO 37; 345pp; English.
XX
CC   The invention relates to an isolated polypeptide. The polypeptide is
CC   useful for diagnosing a pathological condition or a susceptibility to a
CC   pathological condition in a subject, by determining the presence or
CC   amount of expression of the polypeptide in a biological sample and
CC   diagnosing a pathological condition or a susceptibility to a pathological
CC   condition based on the presence or amount of expression of the
CC   polypeptide. The polypeptide is also useful for identifying a binding
CC   partner to the polypeptide, which involves contacting the polypeptide
CC   with a binding partner and determining whether the binding partner
CC   effects an activity of the polypeptide. The polypeptide or the nucleic
CC   acid encoding the polypeptide is useful for preventing, treating, or
CC   ameliorating a medical condition, which involves administering the
CC   polypeptide or the nucleic acid to a mammalian subject. The nucleic acid
CC   is useful for diagnosing a pathological condition or a susceptibility to
CC   a pathological condition in a subject, which involves determining the
CC   presence or absence of a mutation in The nucleic acid, and diagnosing a
CC   pathological condition or susceptibility to a pathological condition
CC   based on the presence or absence of the mutation. The polypeptide, the
CC   nucleic acid and an antibody to the polypeptide are useful for treating
CC   autoimmune disease, Parkinson's disease, silicosis, gastrointestinal
CC   disease, atherosclerosis, haemophilia, thrombocytopenia. The polypeptide,
CC   the nucleic acid and the antibody are useful as immunosuppressive agents,
CC   as adjuvants to enhance immune responses, and as agents to induce higher
CC   affinity antibodies and increase serum immunoglobulin concentrations. The
CC   present sequence represents cDNA encoding a novel human protein. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format direct from USPTO at
CC   seqdata.uspto.gov/sequence.html?DocID=20020168711.
XX
SQ   Sequence 810 BP; 232 A; 224 C; 192 G; 162 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.8;  DB 10;  Length 810;
  Best Local Similarity   85.2%;  Pred. No. 8.5e-05;
  Matches   75;  Conservative    0;  Mismatches   13;  Indels    0;  Gaps    0;

Qy       2155 AATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2214
             |||| |  |||||| ||||  |     |||  ||||||||||||||||||||||||||||
Db        714 AATACAGTTGTTGGCCTCCGGCCTCCCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 773

Qy       2215 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||
Db        774 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 801


RESULT 219
ADM19285
ID   ADM19285 standard; cDNA; 1274 BP.
XX
AC   ADM19285;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Novel human channel/transporter gene #82.
XX
KW   ds; gene; immunosuppressive; antiarthritic; antirheumatic;
KW   antiproliferative; cytostatic; cardiant; vasotropic; cerebroprotective;
KW   nootropic; neuroprotective; antibacterial; virucide; fungicide;
KW   opthalmological; gene therapy; channel/transporter protein;
KW   rheumatoid arthritis; neoplasm; cardiac arrest; cerebrovascular disorder;
KW   cerebral ischemia; angiogenesis; nervous system disorder;
KW   Alzheimer's disease; ocular disorder; corneal infection; wound healing;
KW   epithelial cell proliferation; skin aging; sunburn; transplantation;
KW   chemotaxis; food additive.
XX
OS   Homo sapiens.
XX
PN   WO200154472-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001307.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
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PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-476159/51.
DR P-PSDB; ADM19764.
XX
PT Isolated nucleic acid molecule encoding a channel/transporter protein is
PT used in preventing, treating or ameliorating a medical condition.
XX
PS Claim 1; SEQ ID NO 92; 809pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule encoding a
CC channel/transporter protein or sequences at least 95% identical to a
CC these. The nucleic acids and proteins encoded by them are used to
CC prevent, treat or ameliorate a medical condition in e.g. humans, mice,
CC rabbits, goats, horses, cats, dogs, chickens or sheep. They are also used
CC in diagnosing a pathological condition or susceptibility to a
CC pathological condition. The antibodies to the proteins can also be used
CC in alleviating symptoms associated with the disorders and in diagnostic
CC immunoassays e.g. radioimmunoassays or enzyme linked immunosorbent assays
CC (ELISA). Disorders which are diagnosed or treated include autoimmune
CC diseases e.g. rheumatoid arthritis, hyperproliferative disorders e.g.
CC neoplasms of the breast or liver, cardiovascular disorders e.g. cardiac
CC arrest, cerebrovascular disorders e.g. cerebral ischemia, angiogenesis,
CC nervous system disorders e.g. Alzheimer's disease, infections caused by
CC bacteria, viruses and fungi and ocular disorders e.g. corneal infection.
CC The polypeptides can also be used to aid wound healing and epithelial
CC cell proliferation, to prevent skin aging due to sunburn, to maintain
CC organs before transplantation, for supporting cell culture of primary
CC tissues, to regenerate tissues and in chemotaxis. The polypeptides can
CC also be used as a food additive or preservative to increase or decrease
CC storage capabilities. This sequence corresponds to a gene of the
CC invention.
XX
SQ Sequence 1274 BP; 331 A; 351 C; 387 G; 205 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.8; DB 5; Length 1274;
Best Local Similarity 77.9%; Pred. No. 9.8e-05;
Matches 81; Conservative 0; Mismatches 23; Indels 0; Gaps 0;

Qy 2139 TTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAA 2198
|||||||| || | | ||| ||| | | || | | ||||||||||||
Db 1156 TTCCTTTTCCCTCAATGCAAAAGCCCTTGCTGGCAACGAAAAAGCCTCAAAAAAAAAAAA 1215

Qy 2199 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
||||||||||||||||||||||||||||||||||||||||||||||
Db 1216 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1259

RESULT 220
ACN39160
ID ACN39160 standard; cDNA; 2126 BP.
XX
AC ACN39160;
XX
DT 18-NOV-2004 (first entry)
XX
DE Tumour-associated antigenic target (TAT) cDNA DNA325414, SEQ ID NO:3133.
XX
KW Tumour-associated antigenic target; TAT; human; overexpression; cancer;
KW tumour; diagnosis; cell proliferative disorder; breast cancer;
KW colorectal cancer; lung cancer; ovarian cancer; liver cancer;

KW central nervous system cancer; bladder cancer; pancreatic cancer;
KW cervical cancer; melanoma; leukaemia; hybridisation probe;
KW chromosome identification; chromosome mapping; gene mapping;
KW gene therapy; cytostatic; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2004030615-A2.
XX
PD 15-APR-2004.
XX
PF 29-SEP-2003; 2003WO-US028547.
XX
PR 02-OCT-2002; 2002US-0414971P.
XX
PA (GETH) GENENTECH INC.
XX
PI Wu TD, Zhang Z, Zhou Y;
XX
DR WPI; 2004-347921/32.
DR P-PSDB; ABM81217.
XX
PT New tumor-associated antigenic target polypeptides and nucleic acids,
PT useful in preparing a medicament for treating or detecting a
PT proliferative disorder, e.g. breast, lung, colorectal, ovarian or
PT prostate cancer or tumor.
XX
PS Claim 1; SEQ ID NO 3133; 7273pp; English.
XX
CC The invention relates to human tumour-associated antigenic target (TAT)
CC polypeptides, and their related nucleic acids. The TAT polypeptides are
CC overexpressed in cancer tissues compared to normal tissues, and may thus
CC serve as effective targets for the diagnosis and treatment of cancer in
CC mammals. The invention also relates to nucleic acid and polypeptide
CC sequences at least 80% identical to the TAT nucleic acids and
CC polypeptides; expression vectors and host cells comprising a TAT nucleic
CC acid; an antibody specific for a TAT polypeptide; a peptide or organic
CC molecule which binds to a TAT polypeptide; fusion proteins comprising a
CC TAT polypeptide; and methods and compositions for the treatment or
CC diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,
CC antibodies, antagonists, binding molecules and compositions are useful
CC for diagnosing or treating a cell proliferative disorder associated with
CC increased TAT expression, particularly cancers such as breast cancer,
CC colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC cancer, pancreatic cancer, cervical cancer, cancers of the central
CC nervous system, melanoma and leukaemia. TAT nucleic acids may further be
CC used as hybridisation probes, in chromosome and gene mapping, in
CC chromosome identification and in gene therapy. The present sequence
CC represents a TAT nucleic acid of the invention
XX
SQ Sequence 2126 BP; 442 A; 690 C; 610 G; 384 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.8; DB 13; Length 2126;
Best Local Similarity 85.2%; Pred. No. 0.00012;
Matches 75; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2155 AATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2214
|||| | |||||| |||| | ||| ||||||||||||||||||||||||||
Db 2012 AATACAGTTGTTGGCCTCCGGCCTCCCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2071

Qy 2215 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
||||||||||||||||||||||||||||
Db 2072 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2099

RESULT 221
ADP23018
ID ADP23018 standard; cDNA; 2126 BP.
XX
AC ADP23018;
XX
DT 18-NOV-2004 (first entry)
XX
DE PRO polypeptide encoding cDNA SEQ ID NO:112.
XX
KW ss; gene; PRO; antiinflammatory; antiarthritic; antirheumatic;
KW immunosuppressive; osteopathic; antidiabetic; dermatological;
KW antipsoriatic; antiallergic; antiasthmatic; hepatotropic; respiratory;
KW gene therapy; immune system.
XX
OS Unidentified.
XX
PN WO2004041170-A2.
XX
PD 21-MAY-2004.
XX
PF 30-OCT-2003; 2003WO-US034312.
XX
PR 01-NOV-2002; 2002US-0423394P.
XX
PA (GETH) GENENTECH INC.
XX
PI Clark H, Schoenfeld J, Van Lookeren M, Williams PM, Wood WI;
PI Wu TD;
XX
DR WPI; 2004-419628/39.
DR P-PSDB; ADP23019.
XX
PT New PRO polypeptides and polynucleotides, useful for treating e.g.
PT erythematosus, rheumatoid arthritis, diabetes mellitus, immune-mediated
PT renal disease, or demyelinating diseases of the central or peripheral
PT nervous system.
XX
PS Claim 1; SEQ ID NO 112; 2940pp; English.
XX
CC The invention relates to a novel isolated nucleic acid and the PRO
CC polypeptide encoded by it. A protein of the invention has
CC antiinflammatory, antiarthritic, antirheumatic, immunosuppressive,
CC osteopathic, antidiabetic, dermatological, antipsoriatic, antiallergic,
CC antiasthmatic, hepatotropic, and respiratory activity. A polynucleotide
CC of the invention may have a use in gene therapy. The PRO polypeptide, its
CC agonist, antagonist, or antibody that specifically binds to the
CC polypeptide is useful for treating an immune related disorder such as
CC systemic lupus erythematosus, rheumatoid arthritis, osteoarthritis,
CC juvenile chronic arthritis, a spondyloarthropathy, systemic sclerosis, an
CC idiopathic inflammatory myopathy, Sjogren's syndrome, systemic
CC vasculitis, sarcoidosis, autoimmune haemolytic anaemia, autoimmune
CC thrombocytopenia, thyroiditis, diabetes mellitus, immune-mediated renal
CC disease, a demyelinating disease of the central or peripheral nervous
CC system, idiopathic demyelinating polyneuropathy, Guillain-Barre syndrome,
CC a chronic inflammatory demyelinating polyneuropathy, a hepatobiliary
CC disease, infectious or autoimmune chronic active hepatitis, primary
CC biliary cirrhosis, granulomatous hepatitis, sclerosing cholangitis,
CC inflammatory bowel disease, gluten-sensitive enteropathy, Whipple's
CC disease, an autoimmune or immune-mediated skin disease, a bullous skin
CC disease, erythema multiforme, contact dermatitis, psoriasis, an allergic
CC disease, asthma, allergic rhinitis, atopic dermatitis, food
CC hypersensitivity, urticaria, an immunologic disease of the lung,
CC eosinophilic pneumonia, idiopathic pulmonary fibrosis, hypersensitivity
CC pneumonitis, a transplantation associated disease, graft rejection or
CC graft-versus-host disease. The present sequence encodes a PRO protein of
CC the invention.
XX
SQ Sequence 2126 BP; 442 A; 690 C; 610 G; 384 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.8; DB 13; Length 2126;
Best Local Similarity 85.2%; Pred. No. 0.00012;
Matches 75; Conservative 0; Mismatches 13; Indels 0; Gaps 0;

Qy 2155 AATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2214
|||| | |||||| |||| | ||| ||||||||||||||||||||||||||
Db 2012 AATACAGTTGTTGGCCTCCGGCCTCCCCTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2071

Qy 2215 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
||||||||||||||||||||||||||||
Db 2072 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2099

```
RESULT 222
ACN62578/c
ID   ACN62578 standard; cDNA; 553 BP.
XX
AC   ACN62578;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton developing fibre EST Clone ID: LIB3830-001-Q1-N6-A6, SEQ:17359.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant;
KW   developing fibre; variety Nucotton33B; library LIB3830; molecular tag;
KW   molecular marker; genetic mapping; molecular mapping; seed germination;
KW   plant growth; plant quality; plant yield; plant breeding;
KW   tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 17359; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B developing fibre cDNA library (LIB3830). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 553 BP; 187 A; 71 C; 68 G; 227 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.6;  DB 13;  Length 553;
  Best Local Similarity   71.5%;  Pred. No. 8.3e-05;
  Matches   88;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2120 GCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACT 2179
              | | ||| ||| || | |  | |||||| |  ||  |      | ||  | ||||  |
Db        159 GGCCTTGTTTTTCCCCCCAATGTTTTTATTTGGTTTTTGTTTTTTTTTTTTTCCAAAAAA 100

Qy       2180 GNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2239
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         99 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 40

Qy       2240 AAA 2242
                |||
Db         39 AAA 37


RESULT 223
AAC59682
ID   AAC59682 standard; cDNA; 575 BP.
XX
AC   AAC59682;
XX
DT   02-FEB-2001  (first entry)
XX
DE   Human secreted protein cDNA sequence #4.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein; ss.
XX
OS   Homo sapiens.
XX
PN   WO200056880-A1.
XX
PD   28-SEP-2000.
XX
PF   16-MAR-2000; 2000WO-US006781.
XX
PR   19-MAR-1999;   99US-0125363P.
PR   08-DEC-1999;   99US-0169617P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Komatsoulis G;
XX
DR   WPI; 2000-602220/57.
DR   P-PSDB; AAB34457.
XX
PT   Nucleic acid molecules encoding human secreted proteins, used in
PT   preventing, treating or ameliorating disorders such as Parkinson's and
PT   Alzheimer's diseases, cancers and infections.
XX
PS   Claim 1; Page 342; 422pp; English.
XX
CC   The invention relate to the isolation of genes AAC59679-C59728 encoding
CC   XX human secreted proteins AAB34454-B34503. The genes can be used to
CC   generate fusion proteins by linking to the gene for the human
CC   immunoglobulin G Fc portion (AAC59670) for increasing the stability of
CC   the fusion protein as compared to the human protein only. The genes and
CC   proteins are useful for preventing, ameliorating or treating medical
CC   conditions, e.g. by protein or gene therapy. The genes are isolated from
CC   a range of human tissues disclosed in the specification. The nucleic
CC   acids, proteins, antibodies and (ant)agonists are useful in the
CC   diagnosis, treatment and prevention of: (a) cancer, e.g. breast and
CC   ovarian cancer, and other cancers of the adrenal gland, bone, bone
CC   marrow, breast, gastrointestinal tract, liver, lung, or urogenital; (b)
```

CC immune disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC infectious diseases such as viral, bacterial, fungal and parasitic
CC infections
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 3; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 224
ABZ73430
ID ABZ73430 standard; cDNA; 575 BP.
XX
AC ABZ73430;
XX
DT 12-MAY-2003 (first entry)
XX
DE Secreted protein-encoding gene 150 cDNA clone HHGCS78, SEQ ID NO:160.
XX
KW Human; secreted protein; cancer; tumour; hyperproliferative disorder;
KW autoimmune disorder; inflammation; angiogenic diseases; AIDS;
KW acquired immunodeficiency syndrome; hepatitis; anaemia; wound healing;
KW drug screening; chromosome identification; chromosome mapping;
KW cytostatic; gene therapy; antiinflammatory; immunomodulator; anti-HIV;
KW antianaemic; vulnerary; chromosome 17q11.1; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200277013-A2.
XX
PD 03-OCT-2002.
XX
PF 26-MAR-2002; 2002WO-US009370.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-040578/03.
DR P-PSDB; ABR01096.
XX
PT New human secreted proteins and nucleic acids, useful for detecting or
PT treating cancer or other hyperproliferative disorders, autoimmune
PT disorders, inflammatory disorders, HIV disease, hepatitis or anemia.
XX
PS Claim 21; Page 1241; 2474pp; English.
XX
CC ABZ73281-ABZ73697 represent cDNAs corresponding to 391 human secreted
CC protein genes, and ABP00947-ABP01363 represent the proteins they encode.
CC ABZ73698-ABZ74687 represent human secreted protein genomic fragments. The
CC invention also encompasses antibodies specific for the secreted proteins,
CC the use of the secreted proteins in drug screening and recombinant
CC vectors and host cells comprising a nucleic acid of the invention. The
CC secreted proteins are thought to be involved in biological activities
CC associated with cellular signalling, cellular differentiation, cell
CC migration, prohormone activation and neurotransmitter activity. The
CC secreted proteins, nucleic acids encoding them, antibodies or antibody
CC fragments specific for the secreted proteins, and modulators of protein
CC activity are useful for diagnosing or treating cancers or other
CC hyperproliferative disorders. Additionally, the secreted proteins and
CC their nucleic acids may also be used in the treatment of autoimmune
CC disorders, inflammatory disorders, diseases involving angiogenesis, AIDS
CC (acquired immunodeficiency syndrome), hepatitis, anaemia, and to promote
CC wound healing. Nucleic acids of the invention may be used for chromosome
CC identification, chromosome mapping, in gene therapy, for identifying
CC individuals from minute biological samples, as hybridisation probes, and
CC as molecular weight markers. The present sequence represents a human
CC secreted protein-encoding cDNA clone of the invention
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 8; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 225
ADA97993
ID ADA97993 standard; cDNA; 575 BP.
XX
AC ADA97993;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted protein cDNA sequence #87.
XX
KW human; secreted protein; cardiovascular disorder; arrhythmia;
KW atherosclerosis; stroke; endocarditis; congestive heart failure;
KW rheumatic heart disease; cardiomyopathy; haemorrhoids; varicose veins;
KW migraine; thrombosis; neural disorder; immune system disorder;
KW muscular disorder; reproductive disorder; gastrointestinal disorder;
KW pulmonary disorder; renal disorder; proliferative disorder; cancer; gene;
KW ss.
XX
OS Homo sapiens.
XX
PN WO2003004623-A2.
XX
PD 16-JAN-2003.
XX
PF 26-MAR-2002; 2002WO-US009922.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-247946/24.
XX

PT New human secreted polypeptide and nucleic acid molecules, useful for
PT diagnosing, preventing, prognosticating or treating cardiovascular
PT disorders (e.g. arrhythmia, atherosclerosis, cardiomyopathy, or
PT thrombosis).
XX
PS Claim 1; SEQ ID NO 97; 1572pp; English.
XX
CC The invention comprises the amino acid and coding sequence of human
CC secreted proteins. The DNA and protein sequences of the invention are
CC useful in the treatment of cardiovascular disorders, such as: arrhythmia,
CC atherosclerosis, stroke, endocarditis, congestive heart failure,
CC rheumatic heart disease, cardiomyopathy, haemorrhoids, varicose veins,
CC migraine, or thrombosis. The DNA and protein sequences may also be used
CC for treating or preventing: neural disorders, immune system disorders,
CC muscular disorders, reproductive disorders, gastrointestinal disorders,
CC pulmonary disorders, renal disorders, proliferative disorders and/or
CC cancerous diseases. The present cDNA sequence encodes a human secreted
CC protein of the invention. NOTE: The present sequence is shown on the WIPO
CC website.
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 8; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 226
ADA43897
ID ADA43897 standard; cDNA; 575 BP.
XX
AC ADA43897;
XX
DT 20-NOV-2003 (first entry)
XX
DE Human secreted protein cDNA SEQ ID 85.
XX
KW Gene therapy; human; Antidiabetic; Anorectic; Ophthalmological;
KW Neuroprotective; Cerebroprotective; Antianemic; gene; ss.
XX
OS Homo sapiens.
XX
PN WO2003000865-A2.
XX
PD 03-JAN-2003.
XX
PF 26-MAR-2002; 2002WO-US009105.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-184045/18.
DR P-PSDB; ADA44088.
XX
PT A human secreted protein and nucleic acids useful for preparing a
PT diagnostic or pharmaceutical composition for diagnosing or treating
PT diabetes or conditions related to diabetes, e.g. hyperglycemia, obesity,
PT retinopathy, neuropathy.
XX
PS Claim 7; SEQ ID NO 85; 701pp; English.
XX
CC The invention relates to novel genes and their fragments which are useful
CC for preventing, treating or ameliorating medical conditions e.g. by
CC protein or gene therapy. The genes are isolated from a range of human
CC tissues disclosed in the specification. The nucleic acids and proteins
CC are useful in the diagnosis, treatment and prevention of conditions
CC related to diabetes, e.g. hyperglycaemia, obesity, retinopathy,
CC polyneuropathy, atherosclerosis, anaemia, stroke, gangrene, impotence,
CC infection, cataract, renal disorders, or endocrine disorders. The present
CC sequence was used to illustrate the invention.
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 8; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 227
ADC20156
ID ADC20156 standard; DNA; 575 BP.
XX
AC ADC20156;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human secreted protein coding sequence #95.
XX
KW gene therapy; human; secreted protein; haemopoietic disorder;
KW haematological disorder; anaemia; haemophilia; inflammatory disorder;
KW inflammatory bowel disease; Crohn's disease; neoplastic disease; cancer;
KW leukaemia; wound healing; epithelial cell proliferation disorder;
KW immune disorder; autoimmune disorder; asthmatic disorder;
KW cardiovascular disorder; atherosclerosis; myocarditis;
KW infectious disease; HIV; AIDS; endocrine disorder; diabetes;
KW gastrointestinal disorder; duodenal ulcer; gastroenteritis; gene; ds.
XX
OS Homo sapiens.
XX
PN WO200292787-A2.
XX
PD 21-NOV-2002.
XX
PF 26-MAR-2002; 2002WO-US009257.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-129287/12.
XX
PT New human secreted proteins and nucleic acid molecules, useful for
PT preparing a diagnostic or pharmaceutical composition for diagnosing,

PT preventing or treating hematopoietic or hematologic disorders, e.g.
PT anemia or hemophilia.
XX
PS Claim 1; SEQ ID NO 105; 1512pp; English.
XX
CC The invention comprises the amino acid and coding sequences of human
CC secreted proteins. The DNA and protein sequences of the invention are
CC useful for detecting, preventing, diagnosing, prognosticating, treating
CC or ameliorating: haematopoietic or haematological disorders (e.g. anaemia
CC and haemophilia); inflammatory disorders (e.g. inflammatory bowel disease
CC and Crohn's disease); neoplastic disease (e.g. cancer and leukaemia);
CC wound healing and disorders of epithelial cell proliferation; immune
CC disorders (e.g. autoimmune disorders and asthmatic disorders);
CC cardiovascular disorders (e.g. atherosclerosis and myocarditis);
CC infectious disease (e.g. HIV/AIDS); endocrine disorders (e.g. diabetes);
CC and gastrointestinal disorders (e.g. duodenal ulcers and
CC gastroenteritis). The present DNA sequence encodes a human secreted
CC protein of the invention.
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 10; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 228
ADF10596
ID ADF10596 standard; DNA; 575 BP.
XX
AC ADF10596;
XX
DT 12-FEB-2004 (first entry)
XX
DE Human secreted protein encoding sequence #49.
XX
KW H6EDM64; HBHAA05; HBJCR46; HBJKD16; HCMSX51; HCQBH72; HDPPQ30; HE2CM39;
KW HE9EA10; HGBHP91; HLDQU79; Cytostatic; Hepatotropic; Antidiabetic;
KW Antiinflammatory; neuroprotective; Anti-HIV; Vulnerary; Gynecological;
KW Antiinfertility; Gene therapy; gastrointestinal disorder; cancer;
KW Alzheimer's disease; chromosome identification; ds.
XX
OS Homo sapiens.
XX
PN WO200299085-A2.
XX
PD 12-DEC-2002.
XX
PF 26-MAR-2002; 2002WO-US009135.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-221310/21.
XX
PT New human secreted polypeptides for diagnosing and treating neural,
PT immune system, muscular, reproductive, gastrointestinal, cardiovascular,
PT renal, and proliferative disorders and cancerous diseases.
XX
PS Claim 7; SEQ ID NO 59; 855pp; English.
XX
CC The present invention relates to an isolated polypeptide chosen from 123
CC human secreted proteins, such as, H6EDM64, HBHAA05, HBJCR46, HBJKD16,
CC HCMSX51, HCQBH72, HDPPQ30, HE2CM39, HE9EA10, HGBHP91 and HLDQU79. The
CC polypeptides are useful for the preparation of a diagnostic or
CC pharmaceutical composition for diagnosing or and are useful for treating
CC or preventing diseases or conditions, such as neural, immune system,
CC muscular, reproductive, gastrointestinal, pulmonary, cardiovascular,
CC renal, proliferative disorders and cancerous diseases and conditions. The
CC polypeptides have immune activity, chemotactic activity, and binding
CC activity. to treat and prevent neuronal damage which occurs in certain
CC neuronal disorders or neuro-degenerative conditions such as Alzheimer's
CC disease, Parkinson's disease, and acquired immunodeficiency syndrome
CC (AIDS)-related complex, and to prevent skin aging due to sunburn by
CC stimulating keratinocyte growth. The molecules are also useful to
CC modulate mammalian characteristics including .The encoding sequences are
CC useful for chromosome identification, radiation hybrid mapping, in gene
CC therapy, for identifying individuals from minute biological samples, as
CC additional DNA markers for restriction fragment length polymorphism
CC (RFLP), in forensic biology, molecular weight markers on Southern gels,
CC as diagnostic probes for the presence of a specific mRNA in a particular
CC cell type, to raise anti-DNA antibodies using DNA immunization
CC techniques, and as an antigen to elicit an immune response. The present
CC sequence represents a human secreted protein encoding sequence of the
CC invention.
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 10; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 229
ABZ67037
ID ABZ67037 standard; cDNA; 575 BP.
XX
AC ABZ67037;
XX
DT 26-MAR-2003 (first entry)
XX
DE Human secreted protein encoding cDNA SEQ ID NO 157.
XX
KW Human; secreted protein; nootropic; neuroprotective; cytostatic;
KW virucide; dermatological; immunosuppressive; antiinflammatory; anti-HIV;
KW vulnerary; antibacterial; antiparkinsonian; antisickling; antianaemic;
KW antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective;
KW antiinflammatory; antiallergic; antidiabetic; antiulcer; anticonvulsant;
KW antifungal; antiparasitic; cardiant; immune disorder; infection; vaccine;
KW cardiovascular disorder; neurological disease; nephrotropic;
KW gene therapy; gene; chromosome 17q11.1; ds.
XX
OS Homo sapiens.
XX
PN WO200277186-A2.
XX
PD 03-OCT-2002.

XX
PF 26-MAR-2002; 2002WO-US009188.
XX
PR 27-MAR-2001; 2001US-0278650P.
PR 12-SEP-2001; 2001US-00950082.
PR 12-SEP-2001; 2001US-00950083.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2003-040583/03.
DR P-PSDB; ABP99616.
XX
PT New human secreted proteins encoded by genes contained in cDNA clones
PT (e.g. HGCAC19), useful for preventing, treating or diagnosing e.g. AIDS,
PT multiple sclerosis, herpes virus, leukemia, tick-borne encephalitis or
PT West Nile fever.
XX
PS Claim 7; Page 1256; 2423pp; English.
XX
CC The invention relates to novel human genes (ABZ66891-ABZ68209) and the
CC encoded secreted proteins (ABP99470-ABP99872) useful for preventing,
CC treating or ameliorating medical conditions e.g. by protein or gene
CC therapy. The genes are isolated from a range of human tissues disclosed
CC in the specification. The nucleic acids, proteins, antibodies and
CC (ant)agonists are useful in the diagnosis, treatment and prevention of:
CC (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC lung or urogenital; (b) immune disorders e.g. Addison's disease,
CC allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC bacterial, fungal and parasitic infections
XX
SQ Sequence 575 BP; 200 A; 106 C; 119 G; 150 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 10; Length 575;
Best Local Similarity 66.0%; Pred. No. 8.5e-05;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 415 ACCTTACCTTATGTGCCTTTCTTCATTGCTGATTTTAATCTGTATCCTTTCACTGTAATA 474

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 475 AACTGTAACTATGAGTGCAACACTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 534

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 535 AAAAAAAAAAAAAAAAAAAAAAAAAA 561

RESULT 230
ACN53254/c
ID ACN53254 standard; cDNA; 578 BP.
XX
AC ACN53254;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-004-Q1-N6-F11, SEQ:8035.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 8035; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 578 BP; 239 A; 66 C; 101 G; 172 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.6; DB 13; Length 578;
Best Local Similarity 73.9%; Pred. No. 8.5e-05;
Matches 85; Conservative 0; Mismatches 30; Indels 0; Gaps 0;

Qy 2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
Db 191 TTTAAAATCGCTTTTTCCCCTTTTTTAAAAAAGAATGTTTTTCCCCCTATTTTTTCCCCC 132

Qy 2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 131 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 77

RESULT 231
ACN51300/c
ID ACN51300 standard; cDNA; 583 BP.

```
XX
AC   ACN51300;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-014-Q1-N6-C2, SEQ:6081.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 6081; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 583 BP; 190 A; 30 C; 160 G; 203 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.6;  DB 13;  Length 583;
  Best Local Similarity   66.0%;  Pred. No. 8.5e-05;
    Matches   97;  Conservative    0;  Mismatches   50;  Indels    0;  Gaps    0;

Qy       2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
              | | ||   || |  ||  |  || | |||  ||| || | |||| |||||    |  |
Db        211 AAAAAAAATTTTCCCCCTTTTTTCCCTTTTTTTTTCCCCCCCTTTTTTTTAAAAAAAA 152

Qy       2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
              | |||||            | |          ||||||||||||||||||||||||||||
Db        151 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 92

Qy       2216 AAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||
Db         91 AAAAAAAAAAAAAAAAAAAAAAAAA 65


RESULT 232
AAH33168
ID   AAH33168 standard; cDNA; 896 BP.
XX
AC   AAH33168;
XX
DT   03-SEP-2001  (first entry)
XX
DE   Human colon cancer antigen encoding cDNA SEQ ID NO:224.
XX
KW   Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW   colorectal carcinoma; ss.
XX
OS   Homo sapiens.
XX
PN   WO200122920-A2.
XX
PD   05-APR-2001.
XX
PF   28-SEP-2000; 2000WO-US026524.
XX
PR   29-SEP-1999;   99US-0157137P.
PR   03-NOV-1999;   99US-0163280P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Barash SC,  Birse CE,  Rosen CA;
XX
DR   WPI; 2001-235357/24.
DR   P-PSDB; AAG73737.
XX
PT   Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
PT   useful for preventing, diagnosing and/or treating colorectal cancers.
XX
PS   Claim 1; Page 2364; 9803pp; English.
XX
CC   AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
CC   cancer-associated nucleic acid molecules (N) and proteins (P), where the
CC   proteins are collectively known as colon cancer antigens. The colon
CC   cancer antigens have cytostatic activity and can be used in gene therapy
CC   and vaccine production. N and P may be used in the prevention, diagnosis
CC   and treatment of diseases associated with inappropriate P expression. For
CC   example, N and P may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of P by expressing inactive proteins or to
CC   supplement the patients own production of P. Additionally, N may be used
CC   to produce the colon cancer-associated Ps, by inserting the nucleic acids
CC   into a host cell and culturing the cell to express the proteins. N and P
CC   can be used in the prevention, diagnosis and treatment of colorectal
CC   carcinomas and cancers. AAH37196 to AAH37204 and AAB77789 represent
CC   sequences used in the exemplification of the present invention. N.B.
CC   Pages 666 to 682 and page 7053 of the sequence listing were missing at
CC   time of publication, meaning no sequences are present for SEQ ID NO:1027
CC   to 1052, 7921 and 7922
XX
SQ   Sequence 896 BP; 351 A; 161 C; 159 G; 222 T; 0 U; 3 Other;

  Query Match             3.0%;  Score 67.6;  DB 4;  Length 896;
```

```
  Best Local Similarity   76.6%;  Pred. No. 9.7e-05;
  Matches   82;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
              | ||| |  |  |||||||| | ||||||  |    |  |          |||||||||
Db        787 TGTTTGCAATAGTCTTATTAAAATAAATGTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAA 846

Qy       2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        847 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 893


RESULT 233
ACN40941
ID   ACN40941 standard; cDNA; 1194 BP.
XX
AC   ACN40941;
XX
DT   18-NOV-2004  (first entry)
XX
DE   Tumour-associated antigenic target (TAT) cDNA DNA326971, SEQ ID NO:6056.
XX
KW   Tumour-associated antigenic target; TAT; human; overexpression; cancer;
KW   tumour; diagnosis; cell proliferative disorder; breast cancer;
KW   colorectal cancer; lung cancer; ovarian cancer; liver cancer;
KW   central nervous system cancer; bladder cancer; pancreatic cancer;
KW   cervical cancer; melanoma; leukaemia; hybridisation probe;
KW   chromosome identification; chromosome mapping; gene mapping;
KW   gene therapy; cytostatic; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO2004030615-A2.
XX
PD   15-APR-2004.
XX
PF   29-SEP-2003; 2003WO-US028547.
XX
PR   02-OCT-2002; 2002US-0414971P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Wu TD,  Zhang Z,  Zhou Y;
XX
DR   WPI; 2004-347921/32.
DR   P-PSDB; ABM82359.
XX
PT   New tumor-associated antigenic target polypeptides and nucleic acids,
PT   useful in preparing a medicament for treating or detecting a
PT   proliferative disorder, e.g. breast, lung, colorectal, ovarian or
PT   prostate cancer or tumor.
XX
PS   Claim 1; SEQ ID NO 6056; 7273pp; English.
XX
CC   The invention relates to human tumour-associated antigenic target (TAT)
CC   polypeptides, and their related nucleic acids. The TAT polypeptides are
CC   overexpressed in cancer tissues compared to normal tissues, and may thus
CC   serve as effective targets for the diagnosis and treatment of cancer in
CC   mammals. The invention also relates to nucleic acid and polypeptide
CC   sequences at least 80% identical to the TAT nucleic acids and
CC   polypeptides; expression vectors and host cells comprising a TAT nucleic
CC   acid; an antibody specific for a TAT polypeptide; a peptide or organic
CC   molecule which binds to a TAT polypeptide; fusion proteins comprising a
CC   TAT polypeptide; and methods and compositions for the treatment or
CC   diagnosis of cancer in mammals. TAT polypeptides, nucleic acids,
CC   antibodies, antagonists, binding molecules and compositions are useful
CC   for diagnosing or treating a cell proliferative disorder associated with
CC   increased TAT expression, particularly cancers such as breast cancer,
CC   colorectal cancer, lung cancer, ovarian cancer, liver cancer, bladder
CC   cancer, pancreatic cancer, cervical cancer, cancers of the central
CC   nervous system, melanoma and leukaemia. TAT nucleic acids may further be
CC   used as hybridisation probes, in chromosome and gene mapping, in
CC   chromosome identification and in gene therapy. The present sequence
CC   represents a TAT nucleic acid of the invention
XX
SQ   Sequence 1194 BP; 352 A; 258 C; 310 G; 274 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.6;  DB 13;  Length 1194;
  Best Local Similarity   66.0%;  Pred. No. 0.00011;
  Matches   97;  Conservative    0;  Mismatches   50;  Indels    0;  Gaps    0;

Qy       2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
              |||  ||  ||  || | |   ||   |||||  ||| ||| |||  ||  |   | |||
Db       1045 ACACTATATTTTTATGCTACTTTCCTGTTTGCACTACTACTTTTTTATTAAACGATGTTA 1104

Qy       2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
              |  ||||           |  |          ||||||||||||||||||||||||||||
Db       1105 AATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1164

Qy       2216 AAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||
Db       1165 AAAAAAAAAAAAAAAAAAAAAAAAAA 1191


RESULT 234
AAC98202
ID   AAC98202 standard; cDNA; 1639 BP.
XX
AC   AAC98202;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Human colon cancer antigen nucleotide sequence SEQ ID NO:212.
XX
KW   Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW   identification; cytostatic; cardioactive; neuroprotective; vulnerary;
KW   immunomodulatory; muscular; gynaecological; gastrointestinal;
KW   nephrotropic; antiinfective; antibacterial; gene therapy; wound;
KW   neural disorder; immune system disorder; muscular disorder;
KW   reproductive disorder; gastrointestinal disorder; renal disorder;
KW   infectious disease; cardiovascular disorder; ss.
XX
OS   Homo sapiens.
XX
PN   WO200055351-A1.
XX
PD   21-SEP-2000.
XX
PF   08-MAR-2000; 2000WO-US005883.
XX
PR   12-MAR-1999;   99US-0124270P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2000-587534/55.
DR   P-PSDB; AAB53445.
XX
PT   Colon cancer associated gene sequences, referred to as colon cancer
PT   antigens, useful for the treatment, prevention, and diagnosis of colon
PT   disorders such as colon cancer.
XX
PS   Claim 1; Page 636; 2104pp; English.
XX
CC   AAC97991 to AAC98763 encode the human colon cancer associated proteins,
CC   called human colon cancer antigens, given in AAB53234 to AAB54006. The
CC   human colon cancer antigens can have cytostatic, cardioactive, muscular;
CC   neuroprotective, immunomodulatory, gynaecological, gastrointestinal,
CC   vulnerary, nephrotropic, antiinfective and antibacterial activities, and
CC   can be used in gene therapy. The colon cancer antigen polynucleotides,
CC   proteins and antibodies to the proteins are useful for the prevention,
CC   treatment and diagnosis of colon disorders, such as colon cancer. The
CC   polynucleotides may be used in diagnostics and research, such as for
CC   chromosome identification, and as hybridisation probes. The proteins may
CC   also be used to prevent diseases such as neural disorders, immune system
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CC   disorders, muscular disorders, reproductive disorders, gastrointestinal
CC   disorders, wounds, renal disorders, infectious diseases, and
CC   cardiovascular disorders. AAC98764 to AAC98772 and AAB54007 represent
CC   sequences used in the exemplification of the present invention
XX
SQ   Sequence 1639 BP; 410 A; 398 C; 357 G; 469 T; 0 U; 5 Other;

  Query Match             3.0%;  Score 67.6;  DB 3;  Length 1639;
  Best Local Similarity   73.9%;  Pred. No. 0.00012;
  Matches   85;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy       2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
             ||||  | |||     ||||||  |   ||||||| || |      ||  |  |       |
Db       1510 TTTATGAGTCTCAAGTTTTATTATTGCAATAAAAGTGCTTTATGCCGGCTTTTCTCAAAA 1569

Qy       2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1570 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1624


RESULT 235
AAV63192
ID   AAV63192 standard; cDNA; 3899 BP.
XX
AC   AAV63192;
XX
DT   25-MAR-2003  (revised)
DT   13-JAN-1999  (first entry)
XX
DE   cDNA from clone dt674_2 which encodes a secreted protein.
XX
KW   Secreted protein; immune stimulating; suppressing;
KW   haematopoiesis regulating activity; tissue growth activity; activin;
KW   inhibin activity; chemotactic; chemokinetic activity; haemostatic;
KW   thrombolytic activity; anti-inflammatory activity; cadherin;
KW   tumour invasion suppressor activity; tumour inhibition activity; ds.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             40. .1503
FT                   /*tag=  a
XX
PN   WO9844113-A1.
XX
PD   08-OCT-1998.
XX
PF   27-MAR-1998;   98WO-US006176.
XX
PR   28-MAR-1997;   97US-00823330.
PR   25-MAR-1998;   98US-00047661.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Racie LA,  Merberg D,  Treacy M;
PI   Spaulding V,  Agostino MJ;
XX
DR   WPI; 1998-542703/46.
DR   P-PSDB; AAW80408.
XX
PT   New isolated polynucleotide(s) and secreted proteins - are obtained from
PT   human cDNA libraries prepared from adult testes, foetal brain, adult
PT   brain, adult blood and placenta.
XX
PS   Claim 22; Page 77-80; 124pp; English.
XX
CC   The present sequence encodes a secreted protein. The nucleic acid
CC   sequence is isolated from a human adult brain cDNA library using probe
CC   AAV63203. The polypeptide may have biological activities such has e.g.
CC   nutritional activity, immune stimulating or suppressing activity,
CC   haematopoiesis regulating activity, tissue growth activity,
CC   activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombolytic activity, receptor/ligand activity, anti-inflammatory
CC   activity, cadherin/tumour invasion suppressor activity, tumour inhibition
CC   activity or other activities. (Updated on 25-MAR-2003 to correct PR
CC   field.)
XX
SQ   Sequence 3899 BP; 1283 A; 716 C; 895 G; 999 T; 0 U; 6 Other;

  Query Match             3.0%;  Score 67.6;  DB 2;  Length 3899;
  Best Local Similarity   76.6%;  Pred. No. 0.00015;
  Matches   82;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
             ||| | |   ||   | || |||||| |  | || |   || |||      |||||||||
Db       3745 TCTCTGCAAATACTATGTTGATAAAATTACTTGTATGTTCCCCTGAAAAAAAAAAAAAAA 3804

Qy       2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db       3805 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3851


RESULT 236
ABQ92042
ID   ABQ92042 standard; cDNA; 3899 BP.
XX
AC   ABQ92042;
XX
DT   04-OCT-2002  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 39.
XX
KW   Human; cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic;
KW   antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
KW   neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
KW   antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic;
KW   immunostimulant; antiparasitic; secreted protein; transmembrane protein;
KW   cytokine; cell proliferation; cell differentiation; autoimmune disease;
KW   stem cell; growth factor; nervous system disease; neuropathy;
KW   Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW   osteoporosis; severe combined immunodeficiency; SCID; infection;
KW   multiple sclerosis; rheumatoid arthritis; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2002065394-A1.
XX
PD   30-MAY-2002.
XX
PF   22-DEC-2000; 2000US-00745763.
XX
PR   18-MAR-1998;   98US-00040963.
XX
PA   (JACO/) JACOBS K.
PA   (MCCO/) MCCOY J M.
PA   (LAVA/) LAVALLIE E R.
PA   (COLL/) COLLINS-RACIE L A.
PA   (EVAN/) EVANS C.
PA   (MERB/) MERBERG D.
PA   (TREA/) TREACY M.
PA   (SPAU/) SPAULDING V.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Spaulding V;
XX
DR   WPI; 2002-582343/62.
DR   P-PSDB; ABP61826.
XX
PT   Novel secreted or transmembrane protein and polynucleotide encoding the
PT   protein, useful for diagnosis and treatment of neurological disorders,
PT   cancer, autoimmune diseases, bone disorders and lung or liver fibrosis.
XX
PS   Disclosure; Page 159-161; 284pp; English.
XX
CC   The invention relates to human secreted or transmembrane protein (I),
CC   their fragments and is encoded by specific complementary deoxyribonucleic
```

CC acid (cDNA) inserts (II), where the protein is substantially free from
CC other mammalian proteins. (I) are useful for preventing, treating or
CC ameliorating a medical condition, especially immunological treatment or
CC prevention of tumours. (I) exhibits activity relating to angiogenesis,
CC cytokine, cell proliferation, cell differentiation, antiinflammatory,
CC stem cell growth factor activity and activin or inhibin-related
CC activities. (I) can be used to manipulate stem cells in culture to give
CC rise to neuroepithelial cells that can be used to augment or replace
CC cells damaged by illness, autoimmune disease, accidental damage or
CC genetic disorders. (I) induces the proliferation of neural cells and
CC regeneration of nerve and brain tissue and is useful for the treatment of
CC central and peripheral nervous system diseases and neuropathies, such as
CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC lateral sclerosis. (I) is involved in chemotactic or chemokinetic
CC activity, regulation of haematopoiesis and is useful for treating myeloid
CC or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
CC and for regeneration of bone, cartilage, tendon, ligament and/or nerve
CC tissue growth and in tissue repair, healing of burns, incisions, ulcers,
CC for treating osteoporosis, osteoarthritis, bone degenerative disorders or
CC periodontal disease. (I) is also useful for gut protection or
CC regeneration and treatment of lung or liver fibrosis, reperfusion injury
CC in various tissues, various immune deficiencies and disorders including
CC severe combined immunodeficiency (SCID), bacterial or fungal infections,
CC autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,
CC diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
CC such as asthma or other respiratory problems. (II) is useful to express
CC recombinant protein, as markers for tissues in which the corresponding
CC protein is preferentially expressed and in gene therapy. The present
CC sequence is that of a polynucleotide of the invention
XX
SQ Sequence 3899 BP; 1283 A; 716 C; 895 G; 999 T; 0 U; 6 Other;

Query Match 3.0%; Score 67.6; DB 6; Length 3899;
Best Local Similarity 76.6%; Pred. No. 0.00015;
Matches 82; Conservative 0; Mismatches 25; Indels 0; Gaps 0;

Qy 2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
Db 3745 TCTCTGCAAATACTATGTTGATAAAATTACTTGTATGTTCCCCTGAAAAAAAAAAAAAAA 3804

Qy 2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 3805 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3851

RESULT 237
ADQ24888
ID ADQ24888 standard; DNA; 5625 BP.
XX
AC ADQ24888;
XX
DT 26-AUG-2004 (first entry)
XX
DE Human soft tissue sarcoma-upregulated DNA - SEQ ID 7708.
XX
KW soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human;
KW ds.
XX
OS Homo sapiens.
XX
PN WO2004048938-A2.
XX
PD 10-JUN-2004.
XX
PF 26-NOV-2003; 2003WO-US038193.
XX
PR 26-NOV-2002; 2002US-0429739P.
XX
PA (PROT-) PROTEIN DESIGN LABS INC.
XX
PI Aziz N, Ginsburg WM, Zlotnik A;
XX
DR WPI; 2004-441208/41.
XX
PT Early detection of soft tissue sarcoma comprises determining expression
PT of a gene in a first soft tissue sample and a normal soft tissue sample
PT and comparing the gene expression, also useful in treating soft tissue
PT sarcoma.
XX
PS Example 2; SEQ ID NO 7708; 210pp; English.
XX
CC The invention relates to a novel method for detecting soft tissue sarcoma
CC which comprises obtaining a first soft tissue sample from an individual
CC and a normal soft tissue sample from the same or different individual,
CC determining the expression of a gene in both samples and comparing the
CC expression of the gene in both soft tissue samples, where a higher level
CC of protein expression in the first soft tissue sample indicates the
CC presence of soft tissue sarcoma. The method of the invention has
CC cytostatic applications and may be useful for detecting soft tissue
CC sarcoma, possibly via gene therapy or vaccine production. The nucleic
CC acid sequences may be useful in diagnostic and screening applications.
CC The current sequence is that of a human soft tissue sarcoma-upregulated
CC DNA of the invention. The current sequence is not shown within the
CC specification per se but was submitted in CD format by the inventor.
XX
SQ Sequence 5625 BP; 1318 A; 1579 C; 1667 G; 1010 T; 0 U; 51 Other;

Query Match 3.0%; Score 67.6; DB 12; Length 5625;
Best Local Similarity 66.0%; Pred. No. 0.00017;
Matches 97; Conservative 0; Mismatches 50; Indels 0; Gaps 0;

Qy 2096 ACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTA 2155
Db 5230 ACCAAGGCAATGTAACTTTTGATTTTCGGTCAATTTAAGTTCTTTTGTCACCAAATATTA 5289

Qy 2156 ATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2215
Db 5290 ATAAACAGTTTTGACTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 5349

Qy 2216 AAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 5350 AAAAAAAAAAAAAAAAAAAAAAAAAAA 5376

RESULT 238
ABV56723
ID ABV56723 standard; cDNA; 453 BP.
XX
AC ABV56723;
XX
DT 17-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 56714.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX

DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 10934; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 453 BP; 195 A; 131 C; 81 G; 46 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.4; DB 5; Length 453;
Best Local Similarity 68.7%; Pred. No. 8.7e-05;
Matches 92; Conservative 0; Mismatches 42; Indels 0; Gaps 0;

Qy 2109 ATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGG 2168
Db 47 ATCAAATATACCGTATACTTTAGAAAATGTCTCAGTTGCTTTTATTAAATAAAATGTTGA 106

Qy 2169 TCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2228
Db 107 TGGTTTGAAAAATTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 166

Qy 2229 AAAAAAAAAAAAA 2242
Db 167 AAAAAAAAAAAAA 180

RESULT 239
AAH70126/c
ID AAH70126 standard; cDNA; 545 BP.
XX
AC AAH70126;
XX
DT 19-SEP-2001 (first entry)
XX
DE Human cervical cancer marker nucleic acid 1400.
XX
KW Cervical cancer; cytostatic; pre-malignant condition; gene therapy; ss.
XX
OS Homo sapiens.
XX
PN WO200142467-A2.
XX
PD 14-JUN-2001.
XX
PF 08-DEC-2000; 2000WO-US033312.
XX
PR 08-DEC-1999; 99US-0169681P.
PR 21-DEC-1999; 99US-0171350P.
PR 14-MAR-2000; 2000US-0189315P.
PR 12-MAY-2000; 2000US-0203791P.
PR 09-JUN-2000; 2000US-0210600P.
PR 21-JUL-2000; 2000US-0220114P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Deeds J, Berger A, Zhao X;
XX
DR WPI; 2001-375006/39.
XX
PT New isolated nucleic acid for diagnosing and treating cervical cancer and
PT for assessing and detecting compounds for treating the cancer.
XX
PS Claim 1; Page 319-320; 1051pp; English.
XX
CC The invention relates to novel genes (AAH68727-AAH73383) associated with
CC cervical cancer with cytostatic activity. The nucleic acids and encoded
CC polypeptides are useful: to assess if a patient is afflicted with
CC cervical cancer or has a pre-malignant condition; to monitor the
CC progression of cervical cancer or a premalignant condition in a patient;
CC and to select and/or assess the efficacy of a compound or therapy for
CC inhibiting cervical cancer in a patient. The nucleic acids may also be
CC useful for gene therapy
XX
SQ Sequence 545 BP; 200 A; 40 C; 23 G; 209 T; 0 U; 73 Other;

Query Match 3.0%; Score 67.4; DB 4; Length 545;
Best Local Similarity 55.1%; Pred. No. 9.2e-05;
Matches 98; Conservative 0; Mismatches 80; Indels 0; Gaps 0;

Qy 2065 TTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTT 2124
Db 275 TTNCCCTNNNANTTTNNNATNTTTTTTTTTTTGNANTTTTTTCCCCCCAANTTTTTTTTT 216

Qy 2125 TGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTC 2184
Db 215 NNNNNTTTTTTTTNNTNNTTTTNAANTTTTTTTNAAAAAAANTTTTTTTTNAANTTTTTT 156

Qy 2185 CCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 155 NAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 98

RESULT 240
ACN87636/c
ID ACN87636 standard; DNA; 637 BP.
XX
AC ACN87636;
XX
DT 02-DEC-2004 (first entry)
XX
DE Breast cancer related marker, seq id 8786.
XX
KW Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS Homo sapiens.
XX
PN US2003099974-A1.
XX
PD 29-MAY-2003.
XX
PF 18-JUL-2002; 2002US-00198846.
XX
PR 18-JUL-2001; 2001US-0306220P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX
DR WPI; 2003-787014/74.
XX
PT Novel isolated polypeptide associated with breast cancer, useful for
PT detecting presence of polypeptide in sample, as a marker for breast
PT cancer.
XX
PS Disclosure; SEQ ID NO 8786; 36pp; English.
XX
CC The invention relates to an isolated polypeptide (I) associated with
CC breast cancer which is encoded by a nucleic acid molecule comprising a
CC nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC the polypeptide of the invention. The activity of the polypeptide of the
CC invention may be described as cytostatic. The antibody is useful for
CC detecting the presence of (I) in a sample. Nucleic acid molecules of the

```
CC   invention are useful in the detection of breast tumours. (I) is useful as
CC   a marker for breast cancer and in breast cancer therapy. Sequences given
CC   in records ACN78851-ACN92934 represent nucleic acid markers associated
CC   with breast cancer. Note: The sequence listing does not form part of the
CC   specification but may be obtained in electronic format from the USPTO web
CC   site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ   Sequence 637 BP; 171 A; 142 C; 95 G; 126 T; 0 U; 103 Other;

  Query Match             3.0%;  Score 67.4;  DB 11;  Length 637;
  Best Local Similarity   55.7%;  Pred. No. 9.7e-05;
  Matches   98;  Conservative    0;  Mismatches   78;  Indels    0;  Gaps    0;

Qy       2067 TGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTG 2126
              |  || |  || | |   | ||          | ||  |||    |  |  |||
Db        276 TTNTTGCCNGGNCNTNTTTTTTTCNGNTTTTTNGTCCCTTNGNTCCNGGCANGGGNTTTT 217

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186
              || |    | ||  |    ||      | |    | |  |||     |  | |||
Db        216 GTTNAANGTTTNTTTTTGGGGCCTGNNNTTTTNANGAATNAGGGTCCCNNGNTCCCCCCC 157

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        156 NAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 101


RESULT 241
ABV30288
ID   ABV30288 standard; cDNA; 4397 BP.
XX
AC   ABV30288;
XX
DT   16-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 30279.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 6577-6578; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ   Sequence 4397 BP; 1330 A; 822 C; 960 G; 1285 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.4;  DB 5;  Length 4397;
  Best Local Similarity   75.5%;  Pred. No. 0.00018;
  Matches   83;  Conservative    0;  Mismatches   27;  Indels    0;  Gaps    0;

Qy       2133 CACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAA 2192
              |||| ||   |||    |  |    ||   ||||    |  | | |||  ||||||||||
Db       4162 CACTTTTCAATTTGTCATGTTACTAAATGGTGTTACATTAAAGCCCTGTGTCCCAAAAAA 4221

Qy       2193 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4222 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 4271


RESULT 242
ABV56400/c
ID   ABV56400 standard; cDNA; 376 BP.
XX
AC   ABV56400;
XX
DT   17-SEP-2002  (first entry)
XX
DE   Human prostate expression marker cDNA 56391.
XX
KW   Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW   pharmacogenomic marker; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200160860-A2.
XX
PD   23-AUG-2001.
XX
PF   20-FEB-2001; 2001WO-US005171.
XX
PR   17-FEB-2000; 2000US-0183319P.
PR   16-MAR-2000; 2000US-0189862P.
PR   25-MAY-2000; 2000US-0207454P.
PR   09-JUN-2000; 2000US-0211314P.
PR   18-JUL-2000; 2000US-0219007P.
PR   13-DEC-2000; 2000US-0255281P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Endege WO,  Monahan JE;
XX
DR   WPI; 2001-662795/76.
XX
PT   Novel isolated nucleic acid molecule associated with cancerous state of
PT   prostate cells and correlating with presence of prostate cancer, useful
PT   for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS   Claim 1; Page 10883; 11750pp; English.
XX
CC   The invention relates to an isolated nucleic acid molecule (I) comprising
CC   a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC   specification or its complement. (I) is useful for: (a) assessing whether
CC   a patient is afflicted with prostate cancer; (b) monitoring the
CC   progression of prostate cancer in a patient; (c) assessing the efficacy
CC   of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC   the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC   (e) selecting a composition for inhibiting prostate cancer in a patient;
CC   (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC   determining whether prostate cancer has metastasized in a patient; (h)
CC   assessing the aggressiveness or indolence of prostate cancer in a patient
CC   ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
```

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XX
SQ   Sequence 376 BP; 81 A; 121 C; 63 G; 111 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.2;  DB 5;  Length 376;
  Best Local Similarity   77.1%;  Pred. No. 9.1e-05;
  Matches   81;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAA 2197
             |||  |||| | ||       |||||||||  |  || || |         ||||||||||
Db        149 TTTTTTTTTTTTTTTGGGGGAAAAATGTTTTTTCCCCCCCCCAAAAAAAAAAAAAAAAAAA 90

Qy       2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||
Db         89 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 45


RESULT 243
AAI88639
ID   AAI88639 standard; cDNA; 384 BP.
XX
AC   AAI88639;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 8699.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO08708.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 1; SEQ ID NO 8699; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 384 BP; 122 A; 82 C; 80 G; 86 T; 0 U; 14 Other;

  Query Match             3.0%;  Score 67.2;  DB 4;  Length 384;
  Best Local Similarity   83.3%;  Pred. No. 9.1e-05;
  Matches   75;  Conservative    0;  Mismatches   15;  Indels    0;  Gaps    0;

Qy       2153 TTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAA 2212
             ||||  | ||  |  | |||||  |||   ||  |||||||||||||||||||||||||
Db        253 TTAACCACAACCTGCGCCTCCATGACTTTTTCNAAAAAAAAAAAAAAAAAAAAAAAAAAA 312

Qy       2213 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||
Db        313 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 342


RESULT 244
AAI89019
ID   AAI89019 standard; cDNA; 386 BP.
XX
AC   AAI89019;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polynucleotide SEQ ID NO 9079.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation; ss.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   P-PSDB; AAO09088.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 1; SEQ ID NO 9079; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 386 BP; 174 A; 58 C; 25 G; 129 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.2;  DB 4;  Length 386;
  Best Local Similarity   77.1%;  Pred. No. 9.1e-05;
  Matches   81;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAA 2197
             ||   | |  ||||  |||||| || |||   | ||   | ||       ||||||||||
Db        223 TTATTTATATTCTTCCTAATAATAAAGTTCCTTTCACACCCTCCTAAAAAAAAAAAAAAA 282

Qy       2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
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```
Db        283 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 327
```

RESULT 245
ACH37468
ID ACH37468 standard; cDNA; 477 BP.
XX
AC ACH37468;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human endothelial cell cDNA #5601.
XX
KW Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW genome mapping; biodiversity; genetic disorder.
XX
OS Homo sapiens.
XX
PN US2003073623-A1.
XX
PD 17-APR-2003.
XX
PF 30-JUL-2001; 2001US-00918995.
XX
PR 30-JUL-2001; 2001US-00918995.
XX
PA (DRMA/) DRMANAC R T.
PA (LABA/) LABAT I.
PA (STAC/) STACHE-CRAIN B.
PA (DICK/) DICKSON M C.
PA (JONE/) JONES L W.
XX
PI Drmanac RT, Labat I, Stache-Crain B, Dickson MC, Jones LW;
XX
DR WPI; 2003-615964/58.
XX
PT New polynucleotide sequences obtained from various cDNA libraries, useful
PT as hybridization probes, as oligomers for PCR, for chromosome and gene
PT mapping, in the recombinant production of protein, or in generating
PT antisense DNA or RNA.
XX
PS Claim 1; SEQ ID NO 24680; 44pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising any one of
CC 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC determined by the technique of SBH (sequencing by hybridisation). Also
CC included is a purified polypeptide comprising a sequence corresponding to
CC a reading frame of the novel polynucleotide. The nucleic acid sequences
CC are useful in diagnostics as expressed sequence tags (EST) for
CC identifying expressed genes or for physical mapping of the human genome,
CC in forensics, in assessing biodiversities, or in identifying mutations
CC responsible for genetic disorders and other traits. The nucleotide
CC sequences are also useful as hybridisation probes, as oligomers for PCR,
CC for chromosome and gene mapping, in the recombinant production of
CC protein, or in generating antisense DNA or RNA. The purified polypeptide
CC is useful for generating antibodies specific for it. The present sequence
CC is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC for this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ Sequence 477 BP; 129 A; 102 C; 101 G; 125 T; 0 U; 20 Other;

```
  Query Match             3.0%;  Score 67.2;  DB 9;  Length 477;
  Best Local Similarity   73.7%;  Pred. No. 9.8e-05;
  Matches   84;  Conservative    0;  Mismatches   30;  Indels    0;  Gaps    0;

Qy       2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
             ||||  | |||    ||||||  |   ||||||| || |     ||  |  |       |
Db        228 TTTATGAGTCTCAAGTTTTATTATTGCAATAAAAGTGCTTTATGCCGGCTTTTCTCANAA 287

Qy       2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2241
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```
Db        288 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 341
```

RESULT 246
ACH21767
ID ACH21767 standard; cDNA; 498 BP.
XX
AC ACH21767;
XX
DT 13-OCT-2003 (first entry)
XX
DE Human adult ovary cDNA #147.
XX
KW Human; ss; sequencing by hybridisation; SBH; expressed sequence tag; EST;
KW genome mapping; biodiversity; genetic disorder.
XX
OS Homo sapiens.
XX
PN US2003073623-A1.
XX
PD 17-APR-2003.
XX
PF 30-JUL-2001; 2001US-00918995.
XX
PR 30-JUL-2001; 2001US-00918995.
XX
PA (DRMA/) DRMANAC R T.
PA (LABA/) LABAT I.
PA (STAC/) STACHE-CRAIN B.
PA (DICK/) DICKSON M C.
PA (JONE/) JONES L W.
XX
PI Drmanac RT, Labat I, Stache-Crain B, Dickson MC, Jones LW;
XX
DR WPI; 2003-615964/58.
XX
PT New polynucleotide sequences obtained from various cDNA libraries, useful
PT as hybridization probes, as oligomers for PCR, for chromosome and gene
PT mapping, in the recombinant production of protein, or in generating
PT antisense DNA or RNA.
XX
PS Claim 1; SEQ ID NO 8979; 44pp; English.
XX
CC The invention relates to an isolated polynucleotide comprising any one of
CC 38043 cDNA sequences, appearing as ACH12789-ACH50831, whose sequence was
CC determined by the technique of SBH (sequencing by hybridisation). Also
CC included is a purified polypeptide comprising a sequence corresponding to
CC a reading frame of the novel polynucleotide. The nucleic acid sequences
CC are useful in diagnostics as expressed sequence tags (EST) for
CC identifying expressed genes or for physical mapping of the human genome,
CC in forensics, in assessing biodiversities, or in identifying mutations
CC responsible for genetic disorders and other traits. The nucleotide
CC sequences are also useful as hybridisation probes, as oligomers for PCR,
CC for chromosome and gene mapping, in the recombinant production of
CC protein, or in generating antisense DNA or RNA. The purified polypeptide
CC is useful for generating antibodies specific for it. The present sequence
CC is one of the 38043 isolated cDNA/EST sequences. Note: The sequence data
CC for this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from USPTO at
CC seqdata.uspto.gov/sequence.html?DocID=20030073623
XX
SQ Sequence 498 BP; 199 A; 94 C; 72 G; 95 T; 0 U; 38 Other;

```
  Query Match             3.0%;  Score 67.2;  DB 9;  Length 498;
  Best Local Similarity   76.0%;  Pred. No. 9.9e-05;
  Matches   79;  Conservative    0;  Mismatches   25;  Indels    0;  Gaps    0;

Qy       2139 TTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAA 2198
             ||  |||  | |  ||||||| || ||  ||   | |||  |     ||||||||||||
Db        327 TTGTTTTGTTTTATTTAATAAATATTTTTCTCAGAATCACCNNNNNAAAAAAAAAAAAAA 386

Qy       2199 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
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                    ||||||||||||||||||||||||||||||||||||||||||||||||||  | |
Db        387 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAANNANA 430

RESULT 247
ACN47785/c
ID   ACN47785 standard; cDNA; 557 BP.
XX
AC   ACN47785;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton primed seed EST Clone ID: LIB3825-015-Q1-N6-A5, SEQ:2566.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW   variety DP50B; library LIB3825; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 2566; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety DP50B primed seed cDNA library (LIB3825). The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format directly from the US patent office at
CC   seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 557 BP; 235 A; 27 C; 105 G; 188 T; 0 U; 2 Other;

  Query Match             3.0%;  Score 67.2;  DB 13;  Length 557;
  Best Local Similarity   58.2%;  Pred. No. 0.0001;
  Matches  117;  Conservative    0;  Mismatches   84;  Indels    0;  Gaps    0;

Qy       2042 TTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAA 2101
              |||  ||   | ||  | |    |||  ||| |       |    | | | |     | |
Db        246 TTTTTTTTTTAAAAAAATTTTTTTTTTTTTTTTCCCTTTTTTTTCCCCTTTTTTTTTCA 187

Qy       2102 TCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAA 2161
              |   ||  |   | ||  |||||  |||  | | ||  |  ||||   || |||| ||||
Db        186 ACCCCCCCCCTTTTAATTTCCTTTTTTTTTACCCCCTCTTTTTTTTCTTTTTTAAAAAAA 127

Qy       2162 ATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2221
              |           |  |          ||||||||||||||||||||||||||||||||||
Db        126 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 67

Qy       2222 AAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||
Db          66 AAAAAAAAAAAAAAAAAAAA 46


RESULT 248
AAC79893
ID   AAC79893 standard; cDNA; 680 BP.
XX
AC   AAC79893;
XX
DT   09-FEB-2001  (first entry)
XX
DE   Human secreted protein encoding cDNA for gene 45.
XX
KW   Human; secreted protein; cytostatic; antiarthritic; antiasthmatic;
KW   immunosuppressive; antiarteriosclerotic; antiinflammatory; nootropic;
KW   neuroprotective; antidiabetic; tranquiliser; vulnerary; antibacterial;
KW   antipsoriatic; antiarrhythmic; antirheumatic; cardiant; anti-HIV;
KW   autoimmune disorder; allergic condition; cardiovascular disorder; cancer;
KW   neurological disease; tissue repair; ss.
XX
OS   Homo sapiens.
XX
PN   WO200055176-A2.
XX
PD   21-SEP-2000.
XX
PF   09-MAR-2000; 2000WO-US006057.
XX
PR   12-MAR-1999;   99US-0124142P.
PR   11-JUN-1999;   99US-0138597P.
PR   03-DEC-1999;   99US-0168666P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM,  Komatsoulis G;
XX
DR   WPI; 2000-638176/61.
DR   P-PSDB; AAB44874.
XX
PT   Novel 49 human secreted proteins useful for diagnosis, prevention and
PT   treatment of disorders including neurological, cell proliferative,
PT   cardiovascular, and autoimmune/inflammatory disorders and microbial
PT   infections.
XX
PS   Claim 1a; Page 358; 405pp; English.
XX
CC   This invention describes a novel isolated polypeptide (I) comprising an
CC   amino acid sequence at least 95 % identical to a polypeptide sequence
CC   selected from 49 polypeptides encoded by polynucleotide sequences
CC   included in American Type Culture Collection (ATCC) deposit number
```

CC 203917, defined in the specification. The products of the invention have
CC cytostatic, antiarthritic, antiasthmatic, immunosuppressive, nootropic;
CC antiarteriosclerotic, antiinflammatory, neuroprotective, antidiabetic,
CC tranquiliser, vulnerary, antibacterial, antipsoriatic, antiarrhythmic,
CC antirheumatic, cardiant and anti-HIV activity. (I) or a nucleic acid (II)
CC encoding (I) is useful for preventing, treating or ameliorating a medical
CC condition and for diagnosing a pathological condition or susceptibility
CC to the condition. (I) is useful for identifying a binding partner which
CC affects the activity of the polypeptide and for identifying an activity
CC in a biological sample. (I), (II) or an antibody (IV) specific to (I) is
CC also useful for treating or preventing a disease, disorder or condition
CC associated with aberrant expression of (I). Diseases treated or diagnosed
CC include immune disorders such as autoimmune diseases, blood protein
CC disorders, anemia, allergic reactions and conditions such as asthma,
CC organ rejection or graft-versus-host disease, inflammation, hyper
CC proliferative disorders, cardiovascular disorders such as arterioarterial
CC fistula, arrhythmias, arteriosclerosis, coronary thrombosis, organ
CC regeneration, cancer, neovascular glaucoma, diabetic retinopathy,
CC rheumatoid arthritis, psoriasis, diseases associated with increased
CC apoptosis that include acquired immunodeficiency syndrome (AIDS),
CC neurological diseases such as Parkinson's disease, viral, bacterial,
CC fungal or parasitic diseases. They are also used to repair, replace or
CC protect tissue damage by congenital defects, to treat trauma, in surgery,
CC including cosmetic plastic surgery, to treat fibrosis, reperfusion injury
CC or systemic cytokine damage, to stimulate chondrocyte growth, to prevent
CC skin aging due to sunburn, to change a mammal's mental state or physical
CC state by influencing biorhythms, cardiac rhythms, depression, memory,
CC stress and for accelerating wound healing. (I), (II) and/or their agonist
CC or antagonist are useful as food additives or preservatives to increase
CC or decrease storage capabilities, fat content, lipid, protein,
CC carbohydrate, vitamin, mineral or other nutritional components. (I) is
CC useful for screening therapeutic compounds. (II) is useful in forensic
CC biology for detecting DNA sequences and as diagnostic probes for
CC detecting the presence of specific mRNA in a particular cell type
XX
SQ Sequence 680 BP; 251 A; 97 C; 100 G; 232 T; 0 U; 0 Other;

Query Match 3.0%; Score 67.2; DB 3; Length 680;
Best Local Similarity 66.2%; Pred. No. 0.00011;
Matches 96; Conservative 0; Mismatches 49; Indels 0; Gaps 0;

Qy 2098 ATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAAT 2157
Db 521 ATACTCTTTAGTGTTAAGCTAAGGCATTGATTCATGTATCTGTCCTTATAATGAATTAAT 580

Qy 2158 AAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2217
Db 581 AAACTATTTTCCAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 640

Qy 2218 AAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 641 AAAAAAAAAAAAAAAAAAAAAAAAA 665

RESULT 249
AAC77999
ID AAC77999 standard; cDNA; 749 BP.
XX
AC AAC77999;
XX
DT 08-FEB-2001 (first entry)
XX
DE Human cancer associated gene sequence SEQ ID NO:393.
XX
KW Human; cancer associated gene; cancer antigen; detection; cancer;
KW diagnosis; cytostatic; proliferative; vulnerary; immunomodulator;
KW antidiabetic; antiasthmatic; antirheumatic; antiarthritic; antiviral;
KW antiinflammatory; antithyroid; antiallergic; antibacterial; cardiant;
KW dermatological; neuroprotective; thrombolytic; coagulant; nootropic;
KW vasotropic; antipsoriatic; antiangiogenic; gene therapy; inflammation;
KW immune disorder; haematopoietic cell disorder; autoimmune disorder;
KW allergic reaction; graft versus host disease; organ rejection;
KW haemostatic; thrombolytic; cardiovascular disorder; infection;
KW neurological disease; drug screening; ss.
XX
OS Homo sapiens.
XX
PN WO200055350-A1.
XX
PD 21-SEP-2000.
XX
PF 08-MAR-2000; 2000WO-US005882.
XX
PR 12-MAR-1999; 99US-0124270P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM;
XX
DR WPI; 2000-587533/55.
DR P-PSDB; AAB43790.
XX
PT Novel isolated nucleic acids comprising sequences encoding peptides
PT useful for treating or diagnosing e.g. cancer.
XX
PS Claim 1; Page 936; 2352pp; English.
XX
CC AAC77607 to AAC78448 encode the human cancer associated proteins given in
CC AAB43398 to AAB44239. The proteins can have activities based on the
CC tissues and cells the genes are expressed in. Example of activities
CC include: cytostatic; proliferative; vulnerary; immunomodulator;
CC antidiabetic; antiasthmatic; antirheumatic; antiarthritic;
CC antiinflammatory; antithyroid; antiallergic; antibacterial; antiviral;
CC dermatological; neuroprotective; cardiant; thrombolytic; coagulant;
CC nootropic; vasotropic; antipsoriatic and antiangiogenic. The
CC polynucleotides and polypeptides can be used for preventing, treating or
CC ameliorating medical conditions and diagnosing pathological conditions.
CC Polynucleotides, polypeptides, antibodies, agonists and antagonists from
CC the present invention may be used to treat immune disorders by activating
CC or inhibiting the proliferation, differentiation or mobilisation of
CC immune cells, to treat disorders of haematopoietic cells, autoimmune
CC disorders, allergic reactions, graft versus host disease and organ
CC rejection, modulate haemostatic or thrombolytic activity, modulate
CC inflammation, cancers, cardiovascular disorders, neurological disease and
CC bacterial or viral infections. The peptides, nucleotides, antibodies,
CC agonists and antagonists may be also be used in drug screens. AAC78449 to
CC AAC78457 and AAB44240 represent sequences used in the exemplification of
CC the present invention
XX
SQ Sequence 749 BP; 205 A; 209 C; 167 G; 163 T; 0 U; 5 Other;

Query Match 3.0%; Score 67.2; DB 3; Length 749;
Best Local Similarity 77.1%; Pred. No. 0.00011;
Matches 81; Conservative 0; Mismatches 24; Indels 0; Gaps 0;

Qy 2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAA 2197
Db 636 TTCCCAGTTATGAAATTAATAAAAATCAATGGTTTCCACAAAAAAAAAAAAAAAAAAAAA 695

Qy 2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 696 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 740

RESULT 250
ABQ54165/c
ID ABQ54165 standard; cDNA; 749 BP.
XX
AC ABQ54165;
XX
DT 22-AUG-2002 (first entry)
XX
DE Human ovarian antigen HLQBT44 cDNA, SEQ ID NO:45.
XX
KW Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW ovarian cancer; breast cancer; tumour; reproductive system disorder;

```
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   P-PSDB; ABP41088.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT   cancer), immune disorders, cardiovascular disorders and neurological
PT   diseases.
XX
PS   Claim 1; SEQ ID NO 45; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
CC   sequence represents cDNA encoding a human ovarian antigen of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 749 BP; 163 A; 167 C; 209 G; 205 T; 0 U; 5 Other;

  Query Match             3.0%;  Score 67.2;  DB 6;  Length 749;
  Best Local Similarity   77.1%;  Pred. No. 0.00011;
  Matches   81;  Conservative    0;  Mismatches   24;  Indels    0;  Gaps    0;

Qy       2138 TTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAA 2197
             || ||  ||||   ||||||||||||    | | ||         ||||||||||
Db        114 TTCCCAGTTATGAAATTAATAAAAATCAATGGTTTCCACAAAAAAAAAAAAAAAAAAAAA 55

Qy       2198 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||
Db         54 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 10


RESULT 251
AAH72615
ID   AAH72615 standard; cDNA; 1043 BP.
XX
AC   AAH72615;
XX
DT   19-SEP-2001  (first entry)
XX
DE   Human cervical cancer marker nucleic acid 3889.
XX
KW   Cervical cancer; cytostatic; pre-malignant condition; gene therapy; ss.
XX
OS   Homo sapiens.
XX
PN   WO200142467-A2.
XX
PD   14-JUN-2001.
XX
PF   08-DEC-2000; 2000WO-US033312.
XX
PR   08-DEC-1999;   99US-0169681P.
PR   21-DEC-1999;   99US-0171350P.
PR   14-MAR-2000; 2000US-0189315P.
PR   12-MAY-2000; 2000US-0203791P.
PR   09-JUN-2000; 2000US-0210600P.
PR   21-JUL-2000; 2000US-0220114P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Schlegel R,  Deeds J,  Berger A,  Zhao X;
XX
DR   WPI; 2001-375006/39.
XX
PT   New isolated nucleic acid for diagnosing and treating cervical cancer and
PT   for assessing and detecting compounds for treating the cancer.
XX
PS   Claim 1; Page 763; 1051pp; English.
XX
CC   The invention relates to novel genes (AAH68727-AAH73383) associated with
CC   cervical cancer with cytostatic activity. The nucleic acids and encoded
CC   polypeptides are useful: to assess if a patient is afflicted with
CC   cervical cancer or has a pre-malignant condition; to monitor the
CC   progression of cervical cancer or a premalignant condition in a patient;
CC   and to select and/or assess the efficacy of a compound or therapy for
CC   inhibiting cervical cancer in a patient. The nucleic acids may also be
CC   useful for gene therapy
XX
SQ   Sequence 1043 BP; 299 A; 261 C; 201 G; 251 T; 0 U; 31 Other;

  Query Match             3.0%;  Score 67.2;  DB 4;  Length 1043;
  Best Local Similarity   71.9%;  Pred. No. 0.00012;
  Matches   87;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy       2122 CTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGN 2181
              | || |  ||  ||||||   |  ||  || |  |   |||   ||  |      || |
Db        213 CATTCCAATAAAACTCTTCTATAATACTTTTTACAAGTAAAAACTGACCAATGTAACAGG 272

Qy       2182 CTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2241
              |||||||||||||||||||||||||||||| ||||||||||||||||||||||||
Db        273 TTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAA 332

Qy       2242 A 2242
              |
Db        333 A 333


RESULT 252
ABQ54594
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ID   ABQ54594 standard; cDNA; 1058 BP.
XX
AC   ABQ54594;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HCOMW35 cDNA, SEQ ID NO:474.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; chromosome 22q13.31;
KW   gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   P-PSDB; ABP41517.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT   cancer), immune disorders, cardiovascular disorders and neurological
PT   diseases.
XX
PS   Claim 1; SEQ ID NO 474; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
CC   sequence represents cDNA encoding a human ovarian antigen of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 1058 BP; 288 A; 256 C; 276 G; 235 T; 0 U; 3 Other;

  Query Match             3.0%;  Score 67.2;  DB 6;  Length 1058;
  Best Local Similarity   84.3%;  Pred. No. 0.00013;
  Matches   75;  Conservative    0;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       2154 TAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2213
              |  |  ||||||||||| |||| ||          ||||||||||||||||||||||||||||
Db        914 TCAATAAAATGTTGGTTTCCAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 973

Qy       2214 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||
Db        974 AAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1002


RESULT 253
AAC89723
ID   AAC89723 standard; cDNA; 1091 BP.
XX
AC   AAC89723;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Maize ZmGnsN1-1 glucanase cDNA.
XX
KW   Maize; ZmGnsN1-1; glucanase; plant growth; disease resistance;
KW   transgenic plant; mutation detection; expression analysis; ss.
XX
OS   Zea mays.
XX
PN   WO200073470-A2.
XX
PD   07-DEC-2000.
XX
PF   08-JUN-1999;   99WO-US012761.
XX
PR   26-MAY-1999;   99US-00320076.
XX
PA   (PION-) PIONEER HI-BRED INT INC.
XX
PI   Simmons CR;
XX
DR   WPI; 2001-061547/07.
DR   P-PSDB; AAB50354.
XX
PT   New exo- and endo-glucanase polypeptides and polynucleotides useful in
PT   e.g. cell wall elongation or expansion, enhancing silage or forage crop
PT   digestibility, improving plant defense against pathogens and stress.
XX
PS   Example 3; Page 90-91; 108pp; English.
XX
CC   The present sequence is one of a number of glucanase polynucleotides
CC   isolated from Zea mays. The nucleic acids encoding for glucanases are
CC   useful for improving cell wall elongation or expansion and altering the
CC   growth of a plant or improving kernel growth rates, enhancing silage or
CC   forage crop digestibility, plant defense against pathogens and stress,
CC   flowering, fruit and seed maturation, abscission and senescence, and
CC   tissue differentiation. The nucleic acids may also be used as probes or
CC   amplification primers in the detection, quantitation or isolation of gene
CC   transcripts, and for detecting deficiencies in mRNA levels in screening
CC   for a desired transgenic plant. They can also be used for detecting gene
CC   mutations, for monitoring upregulation of expression or changes in enzyme
CC   activity in screening assays of compounds, and for detection of any
CC   number of allelic variants of the gene, as molecular markers in plant
CC   breeding programmes. The nucleic acids can be used for recombinant
CC   expression of exo- or endo-glucanase polypeptides, and as immunogens in
CC   preparing or screening antibodies. The proteins may also be used in
CC   assays for enzyme agonists or antagonists, or as immunogens or antigens
CC   to obtain antibodies immunoreactive with the protein
XX
SQ   Sequence 1091 BP; 299 A; 297 C; 276 G; 219 T; 0 U; 0 Other;
```

```
  Query Match             3.0%;  Score 67.2;  DB 4;  Length 1091;
  Best Local Similarity   71.9%;  Pred. No. 0.00013;
  Matches   87;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy       2122 CTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGN 2181
             || ||  || |   ||||| |||||  ||| || || |      |    | ||  |  |
Db        942 CTATGTATTTCTTTTCTTTTCTTTTTGCTTTTTTATGATCGCAATAAAGTTCAGTAGGGG 1001

Qy       2182 CTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2241
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1002 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1061

Qy       2242 A 2242
              |
Db       1062 A 1062
```

```
RESULT 254
ABX95035
ID   ABX95035 standard; cDNA; 1091 BP.
XX
AC   ABX95035;
XX
DT   13-JUN-2003  (first entry)
XX
DE   cDNA encoding maize coleoptile endo-1,3;1,4-beta-glucanase.
XX
KW   Maize; ss; gene; EST; expressed sequence tag; coleoptile; transgenic;
KW   endo-1,3:1,4-beta-glucanase; endoglucanase; forage crop digestibility;
KW   plant development; cell wall composition; soybean endoglucanase level;
KW   plant growth; sunflower endoglucanase level; sorghum endoglucanase level;
KW   canola endoglucanase level; wheat endoglucanase level; plant; feed;
KW   alfalfa endoglucanase level; cotton endoglucanase level;
KW   rice endoglucanase level; barley endoglucanase level;
KW   millet endoglucanase level; silage digestibility.
XX
OS   Zea mays.
XX
FH   Key             Location/Qualifiers
FT   CDS             68. .979
FT                   /*tag=  a
FT                   /product= "Endo-1,3;1,4-beta-glucanase"
XX
PN   US6501008-B1.
XX
PD   31-DEC-2002.
XX
PF   09-JUN-1999;   99US-00328965.
XX
PR   10-JUN-1998;   98US-0088780P.
XX
PA   (REGC ) UNIV CALIFORNIA.
XX
PI   Nevins DJ,  Simmons CR;
XX
DR   WPI; 2003-352191/33.
DR   P-PSDB; ABU08940.
XX
PT   New maize nucleic acid encoding endo-1,3;1,4-beta-glucanase, useful for
PT   modulating the level of endoglucanase protein in a plant such as maize,
PT   soybean, rice, or millet.
XX
PS   Claim 1; Col 45-46; 32pp; English.
XX
CC   The invention relates to an isolated nucleic acid encoding an endo-1,3;
CC   1,4-beta-glucanase. An expression cassette containing the polynucleotide
CC   is useful for modulating the level of endoglucanase protein in a plant
CC   such as maize, soybean, sunflower, sorghum, canola, wheat, alfalfa,
CC   cotton, rice, barley, or millet, by introducing an expression cassette
CC   containing the polynucleotide into a plant and regenerating the plant
CC   cell to produce a regenerated plant, thus inducing expression of the
CC   polynucleotide for a time sufficient to modulate endoglucanase protein in
CC   the plant. The level of endoglucanase protein is increased by this
CC   method. The polynucleotide is useful in the development and growth of
CC   plants, for improving digestibility of silage or forage crops, for
CC   monitoring upregulation of expression or changes in enzyme activity in
CC   screening assays of compounds, in recombinant expression of exo- or
CC   endoglucanase polypeptides, as immunogens in the preparation and/ or
CC   screening of antibodies, in sense or antisense suppression of one or more
CC   exo- or endoglucanase genes in a host cell, tissue or plant, for
CC   modulating transcription or translation, to modulate turnover of
CC   heterologous mRNAs and/or protein synthesis, or to modulate translational
CC   level and/or rates. The polynucleotide is also useful in sequence
CC   shuffling, to alter the composition of the cell walls of the plant, thus
CC   improving digestibility of the plant to be used for feed, and for
CC   improving growth in a plant. The present sequence represents cDNA
CC   encoding the maize coleoptile endo-1,3;1,4-beta-glucanase
XX
SQ   Sequence 1091 BP; 299 A; 297 C; 276 G; 219 T; 0 U; 0 Other;
```

```
  Query Match             3.0%;  Score 67.2;  DB 8;  Length 1091;
  Best Local Similarity   71.9%;  Pred. No. 0.00013;
  Matches   87;  Conservative    0;  Mismatches   34;  Indels    0;  Gaps    0;

Qy       2122 CTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGN 2181
             || ||  || |   ||||| |||||  ||| || || |      |    | ||  |  |
Db        942 CTATGTATTTCTTTTCTTTTCTTTTTGCTTTTTTATGATCGCAATAAAGTTCAGTAGGGG 1001

Qy       2182 CTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2241
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1002 TAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1061

Qy       2242 A 2242
              |
Db       1062 A 1062
```

```
RESULT 255
ADQ23886/c
ID   ADQ23886 standard; DNA; 2007 BP.
XX
AC   ADQ23886;
XX
DT   26-AUG-2004  (first entry)
XX
DE   Human soft tissue sarcoma-upregulated DNA - SEQ ID 6706.
XX
KW   soft tissue sarcoma; cytostatic; gene therapy; vaccine; screening; human;
KW   ds.
XX
OS   Homo sapiens.
XX
PN   WO2004048938-A2.
XX
PD   10-JUN-2004.
XX
PF   26-NOV-2003; 2003WO-US038193.
XX
PR   26-NOV-2002; 2002US-0429739P.
XX
PA   (PROT-) PROTEIN DESIGN LABS INC.
XX
PI   Aziz N,  Ginsburg WM,  Zlotnik A;
XX
DR   WPI; 2004-441208/41.
XX
PT   Early detection of soft tissue sarcoma comprises determining expression
PT   of a gene in a first soft tissue sample and a normal soft tissue sample
PT   and comparing the gene expression, also useful in treating soft tissue
PT   sarcoma.
XX
PS   Example 2; SEQ ID NO 6706; 210pp; English.
XX
CC   The invention relates to a novel method for detecting soft tissue sarcoma
CC   which comprises obtaining a first soft tissue sample from an individual
CC   and a normal soft tissue sample from the same or different individual,
```

```
CC   determining the expression of a gene in both samples and comparing the
CC   expression of the gene in both soft tissue samples, where a higher level
CC   of protein expression in the first soft tissue sample indicates the
CC   presence of soft tissue sarcoma. The method of the invention has
CC   cytostatic applications and may be useful for detecting soft tissue
CC   sarcoma, possibly via gene therapy or vaccine production. The nucleic
CC   acid sequences may be useful in diagnostic and screening applications.
CC   The current sequence is that of a human soft tissue sarcoma-upregulated
CC   DNA of the invention. The current sequence is not shown within the
CC   specification per se but was submitted in CD format by the inventor.
XX
SQ   Sequence 2007 BP; 380 A; 536 C; 585 G; 506 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67.2;  DB 12;  Length 2007;
  Best Local Similarity   74.3%;  Pred. No. 0.00015;
  Matches   84;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy       2130 TACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAA 2189
              || | |||   |||| | ||||||  | | |||||||  |        |          |||
Db        513 TAGCCCTCAGGCCTTCTTTCTTATCCAAATAAATGTTTCTTAATGAGAAAAAAAAAAAAA 454

Qy       2190 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        453 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 401


RESULT 256
ADL37542/c
ID   ADL37542 standard; DNA; 346 BP.
XX
AC   ADL37542;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #11432.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 11432; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 346 BP; 81 A; 27 C; 47 G; 139 T; 0 U; 52 Other;

  Query Match             3.0%;  Score 67;  DB 5;  Length 346;
  Best Local Similarity   54.7%;  Pred. No. 9.8e-05;
  Matches   94;  Conservative    0;  Mismatches   78;  Indels    0;  Gaps    0;

Qy       2071 TTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTT 2130
              || |           |  |   | | |   |  || ||      ||   |   ||| |||
Db        244 TTNTTNAAANNNNANCGGGGGGGNCCNNTNTTCNTTNNTCNAAANATTTTTTTTNTTTT 185

Qy       2131 ACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAA 2190
              || | |      ||| |   | |   | |        | ||   |         ||||
Db        184 NCCCCCCCNCNANTTTTTGGNANTTTNANTATNCNNNNCCCCCNNAAAAAAAAAAAAAAA 125

Qy       2191 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 73


RESULT 257
ADI72399/c
ID   ADI72399 standard; DNA; 346 BP.
XX
AC   ADI72399;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #5141.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
```

XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 5141; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 346 BP; 81 A; 27 C; 47 G; 139 T; 0 U; 52 Other;

Query Match 3.0%; Score 67; DB 5; Length 346;
Best Local Similarity 54.7%; Pred. No. 9.8e-05;
Matches 94; Conservative 0; Mismatches 78; Indels 0; Gaps 0;

```
Qy       2071 TTCTAGGTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTT 2130
              || |          |  |   | | |   |  || ||       ||    |     |||  |||
Db        244 TTNTTNAAANNNNANCGGGGGGGNCCNNTNTTCNTTNNTCNAAANATTTTTTTTTNTTTT 185

Qy       2131 ACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAA 2190
               || | |       ||| |   | |   |  |       | ||   |          ||||
Db        184 NCCCCCCCNCNANTTTTTGGNANTTTNANTATNCNNNNCCCCCNNAAAAAAAAAAAAAAA 125

Qy       2191 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        124 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 73
```

RESULT 258
ABV56394/c
ID ABV56394 standard; cDNA; 404 BP.
XX
AC ABV56394;
XX
DT 17-SEP-2002 (first entry)
XX
DE Human prostate expression marker cDNA 56385.
XX
KW Human; prostate cancer; cytostatic; carcinogen; pharmacodyanamic marker;
KW pharmacogenomic marker; gene; ss.
XX
OS Homo sapiens.
XX
PN WO200160860-A2.
XX
PD 23-AUG-2001.
XX
PF 20-FEB-2001; 2001WO-US005171.
XX
PR 17-FEB-2000; 2000US-0183319P.
PR 16-MAR-2000; 2000US-0189862P.
PR 25-MAY-2000; 2000US-0207454P.
PR 09-JUN-2000; 2000US-0211314P.
PR 18-JUL-2000; 2000US-0219007P.
PR 13-DEC-2000; 2000US-0255281P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Schlegel R, Endege WO, Monahan JE;
XX
DR WPI; 2001-662795/76.
XX
PT Novel isolated nucleic acid molecule associated with cancerous state of
PT prostate cells and correlating with presence of prostate cancer, useful
PT for detecting presence of prostate cancer, stage of prostate cancer.
XX
PS Claim 1; Page 10882; 11750pp; English.
XX
CC The invention relates to an isolated nucleic acid molecule (I) comprising
CC a nucleotide sequence given in Tables 1-9 (ABV00010-ABV62213) of the
CC specification or its complement. (I) is useful for: (a) assessing whether
CC a patient is afflicted with prostate cancer; (b) monitoring the
CC progression of prostate cancer in a patient; (c) assessing the efficacy
CC of a test compound to inhibit prostate cancer in a patient; (d) assessing
CC the efficacy of a therapy for inhibiting prostate cancer in a patient;
CC (e) selecting a composition for inhibiting prostate cancer in a patient;
CC (f) assessing the prostate cell carcinogenic potential of a compound; (g)
CC determining whether prostate cancer has metastasized in a patient; (h)
CC assessing the aggressiveness or indolence of prostate cancer in a patient
CC ; (I) is also useful as a pharmacodyanamic or pharmacogenomic marker
XX
SQ Sequence 404 BP; 179 A; 57 C; 64 G; 103 T; 0 U; 1 Other;

Query Match 3.0%; Score 67; DB 5; Length 404;
Best Local Similarity 71.0%; Pred. No. 0.0001;
Matches 88; Conservative 0; Mismatches 36; Indels 0; Gaps 0;

```
Qy       2119 CGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCAC 2178
              | ||  |  |||      | |||  |||| | || ||  |      | ||  || || ||
Db        145 CCCCCCTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTCACCCCCCT 86

Qy       2179 TGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2238
              |    |  ||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         85 TTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 26

Qy       2239 AAAA 2242
              ||||
Db         25 AAAA 22
```

RESULT 259
ADL43889/c
ID ADL43889 standard; DNA; 461 BP.
XX
AC ADL43889;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #17779.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX

OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 17779; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 461 BP; 142 A; 48 C; 96 G; 174 T; 0 U; 1 Other;

Query Match 3.0%; Score 67; DB 5; Length 461;
Best Local Similarity 65.5%; Pred. No. 0.00011;
Matches 97; Conservative 0; Mismatches 51; Indels 0; Gaps 0;

Qy 2095 CACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATT 2154
Db 297 CCCAAAAAAAAAAAAACCCCCCCCCCCTTTTTTTTTAATGATTCATCTTTTTTTTTTTT 238

Qy 2155 AATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2214

Db 237 AATTTTTTTTTTTTTTTTTCCGACAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 178

Qy 2215 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242

Db 177 AAAAAAAAAAAAAAAAAAAAAAAAAAAA 150

RESULT 260
ACN50622/c
ID ACN50622 standard; cDNA; 508 BP.
XX
AC ACN50622;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton mature seed EST Clone ID: LIB3827-002-Q1-N6-E9, SEQ:5403.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW variety Coker 312 Boswell 96 Field; library LIB3827; molecular tag;
KW molecular marker; genetic mapping; molecular mapping; seed germination;
KW plant growth; plant quality; plant yield; plant breeding;
KW tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 5403; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for

```
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Coker 312 Boswell 96 Field mature seed cDNA library
CC   (LIB3827). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from the US patent office at
CC   seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 508 BP; 116 A; 45 C; 124 G; 223 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67;  DB 13;  Length 508;
  Best Local Similarity   71.0%;  Pred. No. 0.00011;
  Matches   88;  Conservative    0;  Mismatches   36;  Indels    0;  Gaps    0;

Qy       2119 CGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCAC 2178
             | |||||  |||  | | |   | |   |  || ||         | ||  || || | |
Db        213 CCCCTTTTTTTTTACCCCCCCCCTTAAAAATTTTTTGGCCCCCTTTTTTTCCCCCCAAA 154

Qy       2179 TGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2238
               | ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        153 ACCCCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 94

Qy       2239 AAAA 2242
              ||||
Db         93 AAAA 90


RESULT 261
ACN47028/c
ID   ACN47028 standard; cDNA; 528 BP.
XX
AC   ACN47028;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton primed seed EST Clone ID: LIB3825-006-Q1-N6-B12, SEQ:1809.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; seed;
KW   variety DP50B; library LIB3825; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 1809; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety DP50B primed seed cDNA library (LIB3825). The sequence
CC   data for this patent did not form part of the printed specification, but
CC   was obtained in electronic format directly from the US patent office at
CC   seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 528 BP; 247 A; 32 C; 76 G; 173 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67;  DB 13;  Length 528;
  Best Local Similarity   73.3%;  Pred. No. 0.00011;
  Matches   85;  Conservative    0;  Mismatches   31;  Indels    0;  Gaps    0;

Qy       2127 CTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCC 2186
              ||||  |  | |||  |||| | || ||   |||||| ||  | |       |
Db        197 CTTTTTCCTTTTTTTTTTTTCTTTTTTTTTGAAAAATTTTTTTTTTTTTTTTTTAAAAAA 138

Qy       2187 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        137 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 82


RESULT 262
AAL08093/c
ID   AAL08093 standard; cDNA; 768 BP.
XX
AC   AAL08093;
XX
DT   07-DEC-2001  (first entry)
XX
DE   Human breast cancer expressed polynucleotide 550.
XX
KW   Human; breast cancer; cell marker; cytostatic; ss.
XX
OS   Homo sapiens.
XX
PN   WO200151628-A2.
XX
PD   19-JUL-2001.
XX
PF   10-JAN-2001; 2001WO-US000798.
XX
PR   14-JAN-2000; 2000US-0176077P.
PR   14-MAR-2000; 2000US-0189167P.
PR   24-MAR-2000; 2000US-0192099P.
PR   29-MAR-2000; 2000US-0193480P.
PR   15-MAY-2000; 2000US-0205230P.
PR   09-JUN-2000; 2000US-0211315P.
PR   25-JUL-2000; 2000US-0220534P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lillie J,  Xu Y,  Wang Y,  Steinmann K;
XX
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```
DR   WPI; 2001-451856/48.
XX
PT   New peptide useful as a marker for the diagnosis of breast cancer.
XX
PS   Claim 1; Page 183; 3695pp; English.
XX
CC   The invention relates to human breast cancer expressed polynucleotides
CC   (AAL07544-AAL26789) and methods of assessing whether a patient is
CC   afflicted with breast cancer by examining the correlation between the
CC   expression of certain markers and the cancerous state of breast cells.
CC   The polynucleotides and encoded polypeptides are potential markers for
CC   detecting, diagnosing, monitoring, characterising treating and
CC   potentially preventing breast cancer. The polynucleotides and encoded
CC   polypeptides are also useful for isolating compounds with cytostatic
CC   activity
XX
SQ   Sequence 768 BP; 232 A; 132 C; 77 G; 173 T; 0 U; 154 Other;

  Query Match             3.0%;  Score 67;  DB 4;  Length 768;
  Best Local Similarity   68.3%;  Pred. No. 0.00013;
  Matches   82;  Conservative    0;  Mismatches   38;  Indels    0;  Gaps    0;

Qy       2123 TTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNC 2182
              |||  |||    |  |||  |||| | ||  |    |||| | ||          |
Db        161 TTTTTTTTNGGNCNTTTTTTTTTTTTTTTTTNNNNAAAANTTTTNNANNTTTTAAAAAAA 102

Qy       2183 TCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        101 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 42


RESULT 263
AAS01021
ID   AAS01021 standard; cDNA; 976 BP.
XX
AC   AAS01021;
XX
DT   29-MAY-2001  (first entry)
XX
DE   Sugarcane plant gene promoter cDNA isolated from clone c67.
XX
KW   Sugarcane promoter region; monocotyledonous plant; stem tissue;
KW   insecticide; herbicide; disease resistance; improved food content;
KW   beta-glucuronidase; GUS; starch biosynthesis; fatty acid biosynthesis;
KW   ADP-glucose pyrophosphorylase; sucrose metabolism; clone c67; ss.
XX
OS   Saccharum sp.
XX
FH   Key             Location/Qualifiers
FT   5'UTR           1. .32
FT                   /*tag=  a
FT   CDS             33. .596
FT                   /*tag=  b
FT                   /note= "Amino acid sequence deduced from the longest and
FT                   conserved ORF"
FT   3'UTR           597. .581
FT                   /*tag=  c
FT   polyA_site      882
FT                   /*tag=  d
XX
PN   WO200118211-A1.
XX
PD   15-MAR-2001.
XX
PF   01-SEP-2000; 2000WO-AU001033.
XX
PR   02-SEP-1999;   99AU-00002625.
XX
PA   (UYQU ) UNIV QUEENSLAND.
XX
PI   Potier B,  Birch RG;
XX
DR   WPI; 2001-218560/22.
DR   P-PSDB; AAU00450.
XX
PT   New sugarcane plant promoters for directing expression of heterologous
PT   nucleic acids in a constitutive or tissue-specific manner in
PT   monocotyledonous plants.
XX
PS   Claim 1; Fig 14; 107pp; English.
XX
CC   The present sequence for sugarcane plant promoter cDNA isolated from
CC   clone c67 is 1 of 11 promoter regions of a transcribable DNA sequence
CC   isolated from various sugarcane cDNA clones (AAS01021-AAS01031). Also
CC   described are 4 promoter regions of specific transcribed DNA sequences
CC   (AAS01032-AAS01035). The nucleic acids are useful for producing
CC   transgenic plants, having an altered phenotype and for driving expression
CC   of a foreign or endogenous DNA sequence, which encode agronomic
CC   properties including insecticide, herbicide, disease resistance, stress
CC   tolerance and improved food content, or increased yields. The foreign or
CC   endogenous DNA sequence may comprise a region transcribed into an
CC   antisense RNA or ribozyme that modulates the expression of a
CC   corresponding target gene, or it may encode beta-glucuronidase (GUS),
CC   luciferase, neomycin phosphotransferase, a product conferring herbicide
CC   tolerance, a product affecting starch biosynthesis or modification, ADP-
CC   glucose pyrophosphorylase, a product involved in fatty acid biosynthesis,
CC   a product conferring insect resistance, a product altering sucrose
CC   metabolism or a gene encoding valuable pharmaceuticals, e.g. antibiotics,
CC   secondary metabolites or vaccines. The promoters are capable of directing
CC   high level expression in many or all cells of a plant, preferentially in
CC   stem or meristem tissue of monocotyledonous plants
XX
SQ   Sequence 976 BP; 320 A; 213 C; 229 G; 214 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 67;  DB 4;  Length 976;
  Best Local Similarity   79.0%;  Pred. No. 0.00014;
  Matches   79;  Conservative    0;  Mismatches   21;  Indels    0;  Gaps    0;

Qy       2143 TTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAA 2202
              |||||  | || ||||||   |||||| ||     |        ||||||||||||||||
Db        845 TTTTAAGTAATAAATAAAGTGGTTGGTTTCACGGTTTAAAAAAAAAAAAAAAAAAAAAAAA 904

Qy       2203 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||
Db        905 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 944


RESULT 264
AAV34271
ID   AAV34271 standard; DNA; 1925 BP.
XX
AC   AAV34271;
XX
DT   25-MAR-2003  (revised)
DT   28-JAN-1999  (first entry)
XX
DE   Human secreted protein gene 64 clone HSLDJ95.
XX
KW   Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW   diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW   developmental abnormality; foetal deficiency; blood; allergy; renal; ds;
KW   immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW   inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW   cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW   osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW   endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS   Homo sapiens.
XX
PN   WO9839446-A2.
XX
PD   11-SEP-1998.
XX
PF   06-MAR-1998;   98WO-US004482.
XX
PR   07-MAR-1997;   97US-0038621P.
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PR 07-MAR-1997; 97US-0040161P.
PR 07-MAR-1997; 97US-0040162P.
PR 07-MAR-1997; 97US-0040163P.
PR 07-MAR-1997; 97US-0040333P.
PR 07-MAR-1997; 97US-0040334P.
PR 07-MAR-1997; 97US-0040336P.
PR 07-MAR-1997; 97US-0040626P.
PR 11-APR-1997; 97US-0043311P.
PR 11-APR-1997; 97US-0043312P.
PR 11-APR-1997; 97US-0043313P.
PR 11-APR-1997; 97US-0043314P.
PR 11-APR-1997; 97US-0043315P.
PR 11-APR-1997; 97US-0043568P.
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PR 11-APR-1997; 97US-0043576P.
PR 11-APR-1997; 97US-0043578P.
PR 11-APR-1997; 97US-0043580P.
PR 11-APR-1997; 97US-0043669P.
PR 11-APR-1997; 97US-0043670P.
PR 11-APR-1997; 97US-0043671P.
PR 11-APR-1997; 97US-0043672P.
PR 11-APR-1997; 97US-0043674P.
PR 23-MAY-1997; 97US-0047492P.
PR 23-MAY-1997; 97US-0047500P.
PR 23-MAY-1997; 97US-0047501P.
PR 23-MAY-1997; 97US-0047502P.
PR 23-MAY-1997; 97US-0047503P.
PR 23-MAY-1997; 97US-0047581P.
PR 23-MAY-1997; 97US-0047582P.
PR 23-MAY-1997; 97US-0047583P.
PR 23-MAY-1997; 97US-0047584P.
PR 23-MAY-1997; 97US-0047585P.
PR 23-MAY-1997; 97US-0047586P.
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PR 23-MAY-1997; 97US-0047588P.
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PR 23-MAY-1997; 97US-0047590P.
PR 23-MAY-1997; 97US-0047592P.
PR 23-MAY-1997; 97US-0047593P.
PR 23-MAY-1997; 97US-0047594P.
PR 23-MAY-1997; 97US-0047595P.
PR 23-MAY-1997; 97US-0047596P.
PR 23-MAY-1997; 97US-0047597P.
PR 23-MAY-1997; 97US-0047598P.
PR 23-MAY-1997; 97US-0047599P.
PR 23-MAY-1997; 97US-0047600P.
PR 23-MAY-1997; 97US-0047601P.
PR 23-MAY-1997; 97US-0047612P.
PR 23-MAY-1997; 97US-0047613P.
PR 23-MAY-1997; 97US-0047614P.
PR 23-MAY-1997; 97US-0047615P.
PR 23-MAY-1997; 97US-0047617P.
PR 23-MAY-1997; 97US-0047618P.
PR 23-MAY-1997; 97US-0047632P.
PR 23-MAY-1997; 97US-0047633P.
PR 06-JUN-1997; 97US-0048964P.
PR 06-JUN-1997; 97US-0048974P.
PR 22-AUG-1997; 97US-0056630P.
PR 22-AUG-1997; 97US-0056631P.
PR 22-AUG-1997; 97US-0056632P.
PR 22-AUG-1997; 97US-0056636P.
PR 22-AUG-1997; 97US-0056637P.
PR 22-AUG-1997; 97US-0056662P.
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PR 22-AUG-1997; 97US-0056875P.
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PR 22-AUG-1997; 97US-0056877P.
PR 22-AUG-1997; 97US-0056878P.
PR 22-AUG-1997; 97US-0056879P.
PR 22-AUG-1997; 97US-0056880P.
PR 22-AUG-1997; 97US-0056881P.
PR 22-AUG-1997; 97US-0056882P.
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PR 22-AUG-1997; 97US-0056886P.
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PR 22-AUG-1997; 97US-0056892P.
PR 22-AUG-1997; 97US-0056893P.
PR 22-AUG-1997; 97US-0056894P.
PR 22-AUG-1997; 97US-0056903P.
PR 22-AUG-1997; 97US-0056908P.
PR 22-AUG-1997; 97US-0056909P.
PR 22-AUG-1997; 97US-0056910P.
PR 22-AUG-1997; 97US-0056911P.
PR 05-SEP-1997; 97US-0057650P.
PR 05-SEP-1997; 97US-0057761P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ruben SM, Rosen CA, Fischer CL, Soppet DR, Carter KC;
PI Bednarik DP, Endress GA, Yu G, Ni J, Feng P, Young PE, Greene JM;
PI Ferrie AM, Duan R, Hu J, Florence KA, Olsen HS, Ebner R, Brewer LA;
PI Moore PA, Shi Y, Lafleur DW, Li Y, Zeng Z, Kyaw H;
XX
DR WPI; 1998-609887/51.
DR P-PSDB; AAW75174.
XX
PT New isolated human genes and the secreted polypeptides they encode -
PT useful for diagnosis and treatment of e.g. cancers, neurological
PT disorders, immune diseases, inflammation or blood disorders.
XX
PS Claim 1; Page 271-273; 447pp; English.
XX
CC This sequence represents a nucleic acid molecule which encodes a secreted
CC human protein. The gene number, and the clone it is derived from, are
CC detailed in the descriptor line. The gene can be used to generate fusion
CC proteins by linking to the gene to a human immunoglobulin Fc portion
CC (e.g. AAV34145) for increasing the stability of the fused protein as
CC compared to the human protein only. The invention relates to 70 novel
CC genes and their fragments (nucleic acid sequences: AAV34154-V34276; amino
CC acid sequences AAW75057-W75179) which are useful for preventing, treating
CC or ameliorating medical conditions e.g. by protein or gene therapy. Also,
CC pathological conditions can be diagnosed by determining the amount of the
CC new polypeptides in a sample or by determining the presence of mutations
CC in the new polynucleotides. Specific uses are described for each of the
CC 70 polynucleotides, based on which tissues they are most highly expressed
CC in (see AAV34154 for described uses). (Updated on 25-MAR-2003 to correct
CC PF field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ Sequence 1925 BP; 491 A; 513 C; 485 G; 433 T; 0 U; 3 Other;

Query Match 3.0%; Score 67; DB 2; Length 1925;
Best Local Similarity 62.0%; Pred. No. 0.00017;
Matches 103; Conservative 1; Mismatches 62; Indels 0; Gaps 0;

Qy 2077 GTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACT 2136
Db 1676 GACGTCCAGCTCTGTCCTCTCTTCCTCACTCCTCCCTTCAGTGTCCTGAGGAACAGGACT 1735

Qy 2137 CTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAA 2196
Db 1736 TTCTCCACATTGTTTTGTATTGCAACATTTTGCATTAAAAGGAAAATCCAMAAAAAAAAA 1795

Qy 2197 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 1796 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1841

RESULT 265
ACD08142

```
ID   ACD08142 standard; cDNA; 1925 BP.
XX
AC   ACD08142;
XX
DT   12-AUG-2003  (first entry)
XX
DE   cDNA encoding novel human secreted protein #118.
XX
KW   Human; immunoglobulin G; IgG; fragment of crystallisation; Fc;
KW   immune system disorder; haematopoietic cell disorder;
KW   immunologic deficiency disorder; ataxia telangiectasia; HIV infection;
KW   Wiskott-Aldrich disorder; thrombocytopenia; haemoglobinuria;
KW   blood coagulation disorder; blood platelet disorder; autoimmune disorder;
KW   Addison's disease; haemolytic anaemia; rheumatoid arthritis; dermatitis;
KW   glomerulonephritis; Grave's disease; allergic reaction;
KW   graft-versus-host disease; hyperproliferative disorder; neoplasm;
KW   infectious disease; nervous system disease; spinal cord disorder;
KW   head trauma; stroke; tissue regeneration; congenital defect; trauma;
KW   wound; burn; incision; ulcer; age disease; osteoporosis;
KW   periodontal disease; liver failure; catabolism; anabolism; metabolism;
KW   food additive; preservative; secreted protein; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003027132-A1.
XX
PD   06-FEB-2003.
XX
PF   04-SEP-1998;   98US-00148545.
XX
PR   07-MAR-1997;   97US-0038621P.
PR   07-MAR-1997;   97US-0040161P.
PR   07-MAR-1997;   97US-0040162P.
PR   07-MAR-1997;   97US-0040163P.
PR   07-MAR-1997;   97US-0040333P.
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PR   11-APR-1997;   97US-0043311P.
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PR   23-MAY-1997;   97US-0047598P.
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PR   23-MAY-1997;   97US-0047612P.
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PR   23-MAY-1997;   97US-0047614P.
PR   23-MAY-1997;   97US-0047615P.
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PR   22-AUG-1997;   97US-0056864P.
PR   22-AUG-1997;   97US-0056872P.
PR   22-AUG-1997;   97US-0056874P.
PR   22-AUG-1997;   97US-0056875P.
PR   22-AUG-1997;   97US-0056876P.
PR   22-AUG-1997;   97US-0056877P.
PR   22-AUG-1997;   97US-0056878P.
PR   22-AUG-1997;   97US-0056879P.
PR   22-AUG-1997;   97US-0056880P.
PR   22-AUG-1997;   97US-0056881P.
PR   22-AUG-1997;   97US-0056882P.
PR   22-AUG-1997;   97US-0056884P.
PR   22-AUG-1997;   97US-0056886P.
PR   22-AUG-1997;   97US-0056887P.
PR   22-AUG-1997;   97US-0056888P.
PR   22-AUG-1997;   97US-0056889P.
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PR   22-AUG-1997;   97US-0056893P.
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PR   22-AUG-1997;   97US-0056903P.
PR   22-AUG-1997;   97US-0056908P.
PR   22-AUG-1997;   97US-0056909P.
PR   22-AUG-1997;   97US-0056910P.
PR   22-AUG-1997;   97US-0056911P.
PR   05-SEP-1997;   97US-0057650P.
PR   05-SEP-1997;   97US-0057761P.
PR   06-MAR-1998;   98WO-US004482.
XX
PA   (RUBE/) RUBEN S M.
PA   (ROSE/) ROSEN C A.
PA   (FISC/) FISCHER C L.
PA   (SOPP/) SOPPET D R.
PA   (CART/) CARTER K C.
PA   (BEDN/) BEDNARIK D R.
PA   (ENDR/) ENDRESS G A.
PA   (YUGG/) YU G.
PA   (NIJJ/) NI J.
PA   (FENG/) FENG P.
PA   (YOUN/) YOUNG P E.
PA   (GREE/) GREENE J M.
PA   (FERR/) FERRIE A M.
PA   (DUAN/) DUAN R.
PA   (HUJJ/) HU J.
PA   (FLOR/) FLORENCE K A.
PA   (OLSE/) OLSEN H S.
PA   (EBNE/) EBNER R.
PA   (BREW/) BREWER L A.
PA   (SHIY/) SHI Y.
XX
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PI Ruben SM, Rosen CA, Fischer CL, Soppet DR, Carter KC;
PI Bednarik DR, Endress GA, Yu G, Ni J, Feng P, Young PE, Greene JM;
PI Ferrie AM, Duan R, Hu J, Florence KA, Olsen HS, Ebner R, Brewer LA;
PI Shi Y;
XX
DR WPI; 2003-466138/44.
DR P-PSDB; ABO02050.
XX
PT Novel isolated human secreted HODAZ50 polypeptide useful for diagnosing
PT or treating deficiencies or disorders of the immune system, autoimmune
PT disorders, hyperproliferative disorders, and infectious diseases.
XX
PS Claim 4; Page 164-165; 243pp; English.
XX
CC The invention describes an isolated human secreted HODAZ50 polypeptide
CC (I) comprising a sequence at least 95% identical to a sequence selected
CC from polypeptide fragment of any one of the 123 polypeptide sequences
CC (PS) fully defined in the specification and having biological activity,
CC polypeptide domain or epitope of PS, secreted form of PS, full-length
CC protein of PS, or variant, allelic variant or species homologue of PS.
CC (I) or a polynucleotide (II) encoding (I) is useful for preventing,
CC treating, or ameliorating a medical condition in a mammalian subject. (I)
CC or (II) is also useful for diagnosing a pathological condition or a
CC susceptibility to a pathological condition in a subject. (I) is useful
CC for identifying a binding partner which involves contacting the
CC polypeptide with the binding partner and determining whether the binding
CC partner affects the activity of the polypeptide. (I) or (II) is useful
CC for diagnosing or treating deficiencies or disorders of the immune
CC system, deficiencies or disorders of haematopoietic cells, to treat
CC immunologic deficiency disorders, ataxia telangiectasia, HIV infection,
CC Wiskott-Aldrich disorders, thrombocytopenia or haemoglobinuria, blood
CC coagulation disorders, blood platelet disorders, autoimmune disorders
CC (e.g., Addison's disease, haemolytic anaemia, rheumatoid arthritis,
CC dermatitis, glomerulonephritis, Grave's disease), allergic reactions,
CC graft-versus-host disease, hyperproliferative disorders (e.g., neoplasms
CC located in the abdomen, bone, breast, digestive system, liver, pancreas,
CC peritoneum, endocrine glands), infectious diseases (e.g., viral,
CC bacterial, fungal or parasitic infection), central and peripheral nervous
CC system diseases (e.g., spinal cord disorders, head trauma or stroke), to
CC differentiate, proliferate and attract cells leading to the regeneration
CC of tissues to repair, replace or protect tissue damaged by congenital
CC defects, trauma (wounds, burns, incisions, or ulcers) age disease (e.g.,
CC osteoporosis, periodontal disease, liver failure) or surgery. (I) or (IV)
CC is useful to modulate mammalian characteristics, to modulate mammalian
CC metabolism affecting catabolism, anabolism, processing, utilisation, and
CC storage of energy, to change a mammal's mental state or physical state,
CC or as a food additive or preservative, such as to increase or decrease
CC storage capabilities, fat content, lipid, protein, carbohydrate,
CC vitamins, minerals, cofactors or other nutritional components. This
CC sequence encodes a novel human secreted protein
XX
SQ Sequence 1925 BP; 491 A; 513 C; 485 G; 433 T; 0 U; 3 Other;

Query Match 3.0%; Score 67; DB 8; Length 1925;
Best Local Similarity 62.0%; Pred. No. 0.00017;
Matches 103; Conservative 1; Mismatches 62; Indels 0; Gaps 0;

Qy 2077 GTCCTCAAGTGCTCGTGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACT 2136
Db 1676 GACGTCCAGCTCTGTCCTCTCTTCCTCACTCCTCCCTTCAGTGTCCTGAGGAACAGGACT 1735

Qy 2137 CTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAA 2196
Db 1736 TTCTCCACATTGTTTTGTATTGCAACATTTTGCATTAAAAGGAAAATCCAMAAAAAAAAA 1795

Qy 2197 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 1796 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1841

RESULT 266
ADL43756/c
ID ADL43756 standard; DNA; 330 BP.
XX
AC ADL43756;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #17646.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 17646; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention.
XX
SQ Sequence 330 BP; 82 A; 41 C; 55 G; 152 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.8; DB 5; Length 330;
Best Local Similarity 64.9%; Pred. No. 0.00011;
Matches 98; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

```
Qy       2092 TGACACATAATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTT 2151
              | | | |  ||  ||  |  |  |  |||||  |||||     | |||  |||| | ||
Db        299 TAAAAAAACATTGTTAGAATCTCCGGCCGCCTAGGCTTTTTGTTTTTTTTTTTTTTTTTT 240

Qy       2152 ATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAA 2211
              ||     ||||      |  |     |  |    ||||||||||||||||||||||||||
Db        239 ATACTCTAAAAAAAGTATGCTCCTTCTTTTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 180

Qy       2212 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||
Db        179 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 149
```

RESULT 267
AAI93716
ID AAI93716 standard; cDNA; 411 BP.
XX
AC AAI93716;
XX
DT 06-NOV-2001 (first entry)
XX
DE Human polynucleotide SEQ ID NO 13776.
XX
KW Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW tissue growth factor; immunomodulatory; cancer; leukaemia;
KW nervous system disorders; arthritis; inflammation; ss.
XX
OS Homo sapiens.
XX
PN WO200164835-A2.
XX
PD 07-SEP-2001.
XX
PF 26-FEB-2001; 2001WO-US004927.
XX
PR 28-FEB-2000; 2000US-00515126.
PR 18-MAY-2000; 2000US-00577409.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-514838/56.
DR P-PSDB; AAO13785.
XX
PT Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT and treating e.g. leukemia, inflammation and immune disorders.
XX
PS Claim 1; SEQ ID NO 13776; 1399pp + Sequence Listing; English.
XX
CC The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC cytokine, cell proliferation or cell differentiation or which may induce
CC production of other cytokines in other cell populations. The
CC polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC peptide therapy. The polypeptides have various cytokine-like activities,
CC e.g. stem cell growth factor activity, haematopoiesis regulating
CC activity, tissue growth factor activity, immunomodulatory activity and
CC activin/inhibin activity and may be useful in the diagnosis and/or
CC treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC inflammation. Note: The sequence data for this patent did not form part
CC of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 411 BP; 157 A; 87 C; 64 G; 101 T; 0 U; 2 Other;

Query Match 3.0%; Score 66.8; DB 4; Length 411;
Best Local Similarity 72.3%; Pred. No. 0.00011;
Matches 86; Conservative 0; Mismatches 33; Indels 0; Gaps 0;

```
Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              || ||||| | || |||||| |    || |   |    || |   |  | |      ||
Db        181 TTTCTTTATCTCTGTTTCCTATCTCTTTCTCCCTTTCCATCTCATTTATCTCTCTATGCT 240

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||  ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        241 CCCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 299
```

RESULT 268
ADI76334/c
ID ADI76334 standard; DNA; 445 BP.
XX
AC ADI76334;
XX
DT 20-MAY-2004 (first entry)
XX
DE Human ovarian cancer DNA marker #9076.
XX
KW Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS Homo sapiens.
XX
PN WO200170979-A2.
XX
PD 27-SEP-2001.
XX
PF 21-MAR-2001; 2001WO-US009126.
XX
PR 21-MAR-2000; 2000US-0191031P.
PR 25-MAY-2000; 2000US-0207124P.
PR 15-JUN-2000; 2000US-0211940P.
PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 9076; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent

```
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 445 BP; 118 A; 51 C; 41 G; 147 T; 0 U; 88 Other;

  Query Match             3.0%;  Score 66.8;  DB 5;  Length 445;
  Best Local Similarity   69.6%;  Pred. No. 0.00012;
  Matches   80;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
             ||| ||    |||  |||| ||       | ||||| ||     ||             |
Db        177 TTTCCCCNGNTTTTTTTTTTCCNNNCNNTTAAAATTTTNNNNCCNGGGGAAAAAAAAA 118

Qy       2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        117 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 63


RESULT 269
ADI70001/c
ID   ADI70001 standard; DNA; 445 BP.
XX
AC   ADI70001;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #2743.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 2743; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 445 BP; 118 A; 51 C; 41 G; 147 T; 0 U; 88 Other;

  Query Match             3.0%;  Score 66.8;  DB 5;  Length 445;
  Best Local Similarity   69.6%;  Pred. No. 0.00012;
  Matches   80;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2128 TTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCA 2187
             ||| ||    |||  |||| ||       | ||||| ||     ||             |
Db        177 TTTCCCCNGNTTTTTTTTTTCCNNNCNNTTAAAATTTTNNNNCCNGGGGAAAAAAAAA 118

Qy       2188 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        117 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 63


RESULT 270
ACN53206/c
ID   ACN53206 standard; cDNA; 553 BP.
XX
AC   ACN53206;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-003-Q1-N6-D8, SEQ:7987.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
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```
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 7987; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 553 BP; 220 A; 47 C; 88 G; 198 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 13;  Length 553;
  Best Local Similarity   72.3%;  Pred. No. 0.00013;
  Matches   86;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              ||   |||  | | |  |||||| | || |   |||   | ||  | |       | |
Db        197 TTTTGTTAAAATTTTCCCCTTTTTTTTTTTGGTTAACTTTTTTTTTTTTTGGGGTTTCCC 138

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||| ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        137 CCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 79


RESULT 271
ADL37504/c
ID   ADL37504 standard; DNA; 610 BP.
XX
AC   ADL37504;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #11394.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 11394; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 610 BP; 175 A; 56 C; 75 G; 163 T; 0 U; 141 Other;

  Query Match             3.0%;  Score 66.8;  DB 5;  Length 610;
  Best Local Similarity   64.7%;  Pred. No. 0.00013;
  Matches   77;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
              ||       || |  |||  |||| | || ||      |           |           |
Db        178 TTNNNNNNCCNCAATTTNNTTTTTTTTTTTTTTNNNNANNAANNNNNNTTTTNTNGNCCCC 119

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        118 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60


RESULT 272
ADI72360/c
ID   ADI72360 standard; DNA; 610 BP.
XX
AC   ADI72360;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #5102.
XX
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```
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 5102; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 610 BP; 175 A; 56 C; 75 G; 163 T; 0 U; 141 Other;

  Query Match             3.0%;  Score 66.8;  DB 5;  Length 610;
  Best Local Similarity   64.7%;  Pred. No. 0.00013;
  Matches   77;  Conservative    0;  Mismatches   42;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
             ||      || |  |||  |||| | || ||     |           |       |
Db        178 TTNNNNNNCCNCAATTTNNTTTTTTTTTTTTTNNNNANNAANNNNNNTTTTNTNGNCCCC 119

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             |  ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
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Db        118 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 60

RESULT 273
ABQ54208
ID   ABQ54208 standard; cDNA; 705 BP.
XX
AC   ABQ54208;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HOFNU55 cDNA, SEQ ID NO:88.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   P-PSDB; ABP41131.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT   cancer), immune disorders, cardiovascular disorders and neurological
PT   diseases.
XX
PS   Claim 1; SEQ ID NO 88; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
```

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CC   sequence represents cDNA encoding a human ovarian antigen of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 705 BP; 271 A; 114 C; 126 G; 187 T; 0 U; 7 Other;

  Query Match             3.0%;  Score 66.8;  DB 6;  Length 705;
  Best Local Similarity   77.7%;  Pred. No. 0.00013;
  Matches   80;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAA 2199
             | ||||| |   || | ||||  ||  |||||    ||     |    ||||||||||||
Db        535 TACTTTTGTACCATGAGTAAACTTGGAGGTCTGTTGCAAGAACCATGAAAAAAAAAAAAA 594

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||
Db        595 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 637


RESULT 274
AAS02661
ID   AAS02661 standard; cDNA; 1365 BP.
XX
AC   AAS02661;
XX
DT   18-JUL-2001  (first entry)
XX
DE   Human secreted protein gene #22.
XX
KW   Human secreted protein; autoimmune disorder; hyperproliferative disorder;
KW   cardiovascular disorder; cerebrovascular disorder; angiogenesis;
KW   nervous system disorder; bacterial infection; viral infection; ss;
KW   fungal infection; ocular disorder; wound healing; tissue regeneration;
KW   epithelial cell proliferation; skin ageing; chemotaxis; IgG Fc region.
XX
OS   Homo sapiens.
XX
PN   WO200123547-A1.
XX
PD   05-APR-2001.
XX
PF   26-SEP-2000; 2000WO-US026337.
XX
PR   27-SEP-1999;   99US-0155806P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Komatsoulis GA,  Ruben SM,  Rosen CA;
XX
DR   WPI; 2001-266151/27.
DR   P-PSDB; AAU01582, AAU01610.
XX
PT   Nucleic acids encoding 26 human secreted polypeptides, useful for
PT   preventing, diagnosing and/or treating e.g. Gaucher's disease,
PT   Alzheimer's disease, Scimitar syndrome, Creutzfeldt-Jacob disease,
PT   diabetes mellitus and multiple sclerosis.
XX
PS   Disclosure; Page 378; 412pp; English.
XX
CC   Sequences AAS02631-AAS02665 represent isolated nucleic acid molecules and
CC   PCR primers of the invention. Secreted proteins and their related nucleic
CC   acids can be used in the diagnosis of or susceptibility to a pathological
CC   condition by determining the presence or absence of a mutation in a
CC   nucleic acid or the presence or amount of expression of a secreted
CC   protein. The sequences are used to prevent, treat or ameliorate a medical
CC   condition in e.g. humans, mice, rabbits, goats, horses, cats, dogs,
CC   chickens or sheep. The antibodies to the polypeptides can also be used in
CC   alleviating symptoms associated with disorders and in diagnostic
CC   immunoassays e.g. radioimmunoassays or enzyme linked immunosorbent assays
CC   (ELISA). The disorders include autoimmune diseases e.g. rheumatoid
CC   arthritis, hyperproliferative disorders e.g. neoplasms of the breast or
CC   liver, cardiovascular disorders e.g. cardiac arrest, cerebrovascular
CC   disorders e.g. cerebral ischaemia, angiogenesis, nervous system disorders
CC   e.g. Alzheimer's disease, infections caused by bacteria, viruses and
CC   fungi and ocular disorders e.g. corneal infection. The peptides can also
CC   be used to aid wound healing and epithelial cell proliferation, to help
CC   prevent skin ageing due to sunburn, to maintain organs before
CC   transplantation, to regenerate tissues, in chemotaxis and as a food
CC   additive or preservative to alter storage capabilities
XX
SQ   Sequence 1365 BP; 419 A; 293 C; 261 G; 392 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 4;  Length 1365;
  Best Local Similarity   77.7%;  Pred. No. 0.00017;
  Matches   80;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAA 2199
             | ||||| |   || | ||||  ||  |||||    ||     |    ||||||||||||
Db       1201 TACTTTTGTACCATGAGTAAACTTGGAGGTCTGTTGCAAGAACCATGAAAAAAAAAAAAA 1260

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||
Db       1261 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1303


RESULT 275
ABZ73522
ID   ABZ73522 standard; cDNA; 1365 BP.
XX
AC   ABZ73522;
XX
DT   12-MAY-2003  (first entry)
XX
DE   Secreted protein-encoding gene 242 cDNA clone HOFNU55, SEQ ID NO:252.
XX
KW   Human; secreted protein; cancer; tumour; hyperproliferative disorder;
KW   autoimmune disorder; inflammation; angiogenic diseases; AIDS;
KW   acquired immunodeficiency syndrome; hepatitis; anaemia; wound healing;
KW   drug screening; chromosome identification; chromosome mapping;
KW   cytostatic; gene therapy; antiinflammatory; immunomodulator; anti-HIV;
KW   antianaemic; vulnerary; chromosome 16q13; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200277013-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009370.
XX
PR   27-MAR-2001; 2001US-0278650P.
PR   12-SEP-2001; 2001US-00950082.
PR   12-SEP-2001; 2001US-00950083.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2003-040578/03.
DR   P-PSDB; ABR01188.
XX
PT   New human secreted proteins and nucleic acids, useful for detecting or
PT   treating cancer or other hyperproliferative disorders, autoimmune
PT   disorders, inflammatory disorders, HIV disease, hepatitis or anemia.
XX
PS   Claim 21; Page 1286; 2474pp; English.
XX
CC   ABZ73281-ABZ73697 represent cDNAs corresponding to 391 human secreted
CC   protein genes, and ABP00947-ABP01363 represent the proteins they encode.
CC   ABZ73698-ABZ74687 represent human secreted protein genomic fragments. The
CC   invention also encompasses antibodies specific for the secreted proteins,
CC   the use of the secreted proteins in drug screening and recombinant
CC   vectors and host cells comprising a nucleic acid of the invention. The
CC   secreted proteins are thought to be involved in biological activities
CC   associated with cellular signalling, cellular differentiation, cell
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CC   migration, prohormone activation and neurotransmitter activity. The
CC   secreted proteins, nucleic acids encoding them, antibodies or antibody
CC   fragments specific for the secreted proteins, and modulators of protein
CC   activity are useful for diagnosing or treating cancers or other
CC   hyperproliferative disorders. Additionally, the secreted proteins and
CC   their nucleic acids may also be used in the treatment of autoimmune
CC   disorders, inflammatory disorders, diseases involving angiogenesis, AIDS
CC   (acquired immunodeficiency syndrome), hepatitis, anaemia, and to promote
CC   wound healing. Nucleic acids of the invention may be used for chromosome
CC   identification, chromosome mapping, in gene therapy, for identifying
CC   individuals from minute biological samples, as hybridisation probes, and
CC   as molecular weight markers. The present sequence represents a human
CC   secreted protein-encoding cDNA clone of the invention
XX
SQ   Sequence 1365 BP; 419 A; 293 C; 261 G; 392 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 8;  Length 1365;
  Best Local Similarity   77.7%;  Pred. No. 0.00017;
  Matches   80;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAA 2199
             | ||||| |   || | ||||  ||  |||||    ||    |    ||||||||||||
Db       1201 TACTTTTGTACCATGAGTAAACTTGGAGGTCTGTTGCAAGAACCATGAAAAAAAAAAAAAA 1260

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||
Db       1261 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1303


RESULT 276
ABZ67129
ID   ABZ67129 standard; cDNA; 1365 BP.
XX
AC   ABZ67129;
XX
DT   26-MAR-2003  (first entry)
XX
DE   Human secreted protein encoding cDNA SEQ ID NO 249.
XX
KW   Human; secreted protein; nootropic; neuroprotective; cytostatic;
KW   virucide; dermatological; immunosuppressive; antiinflammatory; anti-HIV;
KW   vulnerary; antibacterial; antiparkinsonian; antisickling; antianaemic;
KW   antiarthritic; cancer; antirheumatic; hepatotropic; cerebroprotective;
KW   antiinflammatory; antiallergic; antidiabetic; antiulcer; anticonvulsant;
KW   antifungal; antiparasitic; cardiant; immune disorder; infection; vaccine;
KW   cardiovascular disorder; neurological disease; nephrotropic;
KW   gene therapy; gene; chromosome 16q13; ds.
XX
OS   Homo sapiens.
XX
PN   WO200277186-A2.
XX
PD   03-OCT-2002.
XX
PF   26-MAR-2002; 2002WO-US009188.
XX
PR   27-MAR-2001; 2001US-0278650P.
PR   12-SEP-2001; 2001US-00950082.
PR   12-SEP-2001; 2001US-00950083.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2003-040583/03.
DR   P-PSDB; ABP99708.
XX
PT   New human secreted proteins encoded by genes contained in cDNA clones
PT   (e.g. HGCAC19), useful for preventing, treating or diagnosing e.g. AIDS,
PT   multiple sclerosis, herpes virus, leukemia, tick-borne encephalitis or
PT   West Nile fever.
XX
PS   Claim 7; Page 1301; 2423pp; English.
XX
CC   The invention relates to novel human genes (ABZ66891-ABZ68209) and the
CC   encoded secreted proteins (ABP99470-ABP99872) useful for preventing,
CC   treating or ameliorating medical conditions e.g. by protein or gene
CC   therapy. The genes are isolated from a range of human tissues disclosed
CC   in the specification. The nucleic acids, proteins, antibodies and
CC   (ant)agonists are useful in the diagnosis, treatment and prevention of:
CC   (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC   adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC   lung or urogenital; (b) immune disorders e.g. Addison's disease,
CC   allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC   diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC   arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC   myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC   cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC   bacterial, fungal and parasitic infections
XX
SQ   Sequence 1365 BP; 419 A; 293 C; 261 G; 392 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 10;  Length 1365;
  Best Local Similarity   77.7%;  Pred. No. 0.00017;
  Matches   80;  Conservative    0;  Mismatches   23;  Indels    0;  Gaps    0;

Qy       2140 TCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAA 2199
             | ||||| |   || | ||||  ||  |||||    ||    |    ||||||||||||
Db       1201 TACTTTTGTACCATGAGTAAACTTGGAGGTCTGTTGCAAGAACCATGAAAAAAAAAAAAAA 1260

Qy       2200 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||||||
Db       1261 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1303


RESULT 277
ADE79073
ID   ADE79073 standard; DNA; 2187 BP.
XX
AC   ADE79073;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human protein modification and maintenance molecule (PMMM)-53 gene.
XX
KW   protein modification and maintenance molecule; PMMM;
KW   protein modification; protein maintenance; protein function;
KW   protein conformation; protein stabilisation; protein degradation; kinase;
KW   phosphatase; protease; protease inhibitor; isomerase; transferase;
KW   molecular chaperone; anti-HIV; antiallergic; antiinflammatory;
KW   antianaemic; antiparkinsonian; nootropic; anticonvulsant;
KW   antiarteriosclerotic; antiasthmatic; immunosuppressive; antithyroid;
KW   cytostatic; hepatotropic; dermatological; antidiabetic; nephrotropic;
KW   antigout; thyromimetic; neuroprotective; osteopathic; antiarthritic;
KW   antiparasitic; antihelmintic; antipsoriatic; uropathic; ophthalmological;
KW   antirheumatic; haemostatic; antibacterial; virucide; protozoacide;
KW   fungicide; gene therapy; cell proliferative disorder; arteriosclerosis;
KW   hepatitis; polycythaemia vera; psoriasis; primary thromobocytopaenia;
KW   cancer; developmental disorder; anaemia; mental retardation;
KW   neurological disorder; Alzheimer's disease; Parkinson's disease;
KW   epilepsy; autoimmune disorder; inflammatory disorder; AIDS; allergies;
KW   asthma; autoimmune thyroiditis; Crohn's disease; diabetes mellitus;
KW   glomerulonephritis; Goodpasture's syndrome; multiple sclerosis;
KW   arthritis; osteoporosis; pancreatitis; Sjogren's syndrome;
KW   microbial infection; human; gene; ds.
XX
OS   Homo sapiens.
XX
PN   WO2003063688-A2.
XX
PD   07-AUG-2003.
XX
PF   23-JAN-2003; 2003WO-US002500.
XX
PR   25-JAN-2002; 2002US-0351928P.
PR   25-FEB-2002; 2002US-0359903P.
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PR   21-MAR-2002; 2002US-0366837P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Hafalia AJA,  Li JX,  Gorvad AE,  Chawla NK,  Sprague WW,  Lee SY;
PI   Chang H,  Elliott VS,  Ramkumar J,  Khare R,  Emerling BM,  Kable AE;
PI   Tang YT,  Yue H,  Gietzen KJ,  Lee S,  Swarnakar A,  Baughn MR;
PI   Wilson AD,  Jin P,  Chien D,  Hawkins PR,  Jiang X,  Jackson AA;
PI   Bhatia U,  Burrill JD,  Blake JJ,  Ho A,  Zheng W,  Ison CH,  Marquis JP;
PI   Tran UK,  Lal PG,  Warren BA,  Xu Y,  Honchell CD,  Becha SD;
PI   Lehr-Mason PM;
XX
DR   WPI; 2003-636761/60.
DR   P-PSDB; ADE79015.
XX
PT   New human protein modification and maintenance molecules and
PT   polynucleotides, useful for diagnosing, treating or preventing autoimmune
PT   or inflammatory disorders (e.g. AIDS, allergy or anemia), multiple
PT   sclerosis or cancer.
XX
PS   Claim 5; SEQ ID NO 111; 405pp; English.
XX
CC   This invention relates to novel isolated human proteins, which are human
CC   protein modification and maintenance molecules (PMMM). The cellular
CC   processes regulating modification and maintenance of protein molecules
CC   coordinate their function, conformation, stabilisation and degradation.
CC   Each of these processes is mediated by key enzymes or proteins such as
CC   kinases, phosphatases, proteases, protease inhibitors, isomerases,
CC   transferases and molecular chaperones. Compounds which modulate the
CC   proteins of the invention may have anti-HIV, antiallergic,
CC   antiinflammatory, antianaemic, antiparkinsonian, nootropic,
CC   anticonvulsant, antiarteriosclerotic, antiasthmatic, immunosuppressive,
CC   antithyroid, cytostatic, hepatotropic, dermatological, antidiabetic,
CC   nephrotropic, antigout, thyromimetic, neuroprotective, osteopathic,
CC   antiarthritic, antiparasitic, antihelmintic, antipsoriatic, uropathic,
CC   ophthalmological, antirheumatic, haemostatic, antibacterial, virucide,
CC   protozoacide or fungicide activities. The DNA sequence which encode the
CC   proteins of the invention may be useful for gene therapy. The human
CC   protein modification and maintenance molecules (PMMMs), the DNA sequences
CC   which encode them and their modulating compounds are useful for
CC   diagnosing, treating or preventing disorders associated with aberrant
CC   expression of PMMM, particularly cell proliferative disorders (for
CC   example arteriosclerosis, hepatitis, polycythaemia vera, psoriasis,
CC   primary thromobocytopaenia or cancer), developmental disorders (for
CC   example anaemia or mental retardation), neurological disorders (for
CC   example Alzheimer's disease, Parkinson's disease or epilepsy),
CC   autoimmune/inflammatory disorders (for example AIDS, allergies, asthma,
CC   autoimmune thyroiditis, Crohn's disease, diabetes mellitus,
CC   glomerulonephritis, Goodpasture's syndrome, multiple sclerosis,
CC   arthritis, osteoporosis, pancreatitis, Sjogren's syndrome) or microbial
CC   infections. The present sequence is that of a DNA sequence which encodes
CC   a human PMMM of the invention.
XX
SQ   Sequence 2187 BP; 588 A; 641 C; 454 G; 504 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 10;  Length 2187;
  Best Local Similarity   72.3%;  Pred. No. 0.00019;
  Matches   86;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
             | | || |  | | |||    || |   |||| || ||   |   | || | || |
Db       1881 TGGGTTCATAATTTTTTTTAATTGTAACATTATTACAAGAATAAATGTCAAGCATTTATC 1940

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1941 ACTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1999


RESULT 278
AAD07661
ID   AAD07661 standard; cDNA; 2329 BP.
XX
AC   AAD07661;
XX
DT   10-AUG-2001  (first entry)
XX
DE   Human secreted protein-encoding gene 7 cDNA clone HNTDL21, SEQ ID NO:17.
XX
KW   Human; secreted protein; proliferative disorder; cancer; tumour; asthma;
KW   foetal abnormality; developmental abnormality; haematopoietic disorder;
KW   immune system disorder; AIDS; autoimmune disease; rheumatoid arthritis;
KW   Parkinson's disease; cognitive disorder; schizophrenia; skin disorder;
KW   psoriasis; sepsis; diabetes; atherosclerosis; cardiovascular disorder;
KW   inflammation; neurological disorder; Alzheimer's disease; food additive;
KW   angiogenic disorder; kidney disorder; gastrointestinal disorder; allergy;
KW   pregnancy-related disorder; endocrine disorder; infection; wound healing;
KW   cell culture; chemotaxis; vulnerary; binding partner identification;
KW   gene therapy; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             155. .505
FT                   /*tag=  a
FT                   /product= "Human secreted protein precursor"
FT   sig_peptide     155. .232
FT                   /*tag=  b
FT   mat_peptide     233. .502
FT                   /*tag=  c
FT                   /product= "Mature human secreted protein"
XX
PN   WO200134644-A1.
XX
PD   17-MAY-2001.
XX
PF   08-NOV-2000; 2000WO-US030679.
XX
PR   12-NOV-1999;   99US-0164834P.
PR   04-AUG-2000; 2000US-0224007P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Komatsoulis GA,  Olsen HS,  Duan RD,  Ebner R;
XX
DR   WPI; 2001-329070/34.
DR   P-PSDB; AAE03208.
XX
PT   Isolated nucleic acid molecule encoding a human secreted protein is used
PT   in preventing, treating or ameliorating a medical condition.
XX
PS   Claim 1; Page 398; 499pp; English.
XX
CC   AAD07655-AAD07695 represent cDNAs corresponding to 15 human secreted
CC   protein genes, and AAE03202-AAE03242 represent the proteins they encode.
CC   AAE03243-AAE03280 represent human secreted protein fragments or variants.
CC   The secreted proteins and their genes are useful for preventing, treating
CC   or ameliorating medical conditions, e.g., by protein or gene therapy.
CC   Pathological conditions can be diagnosed by determining the amount of the
CC   new protein in a sample or by determining the presence of mutations in
CC   the new genes. Specific uses are described for each of the 15 genes,
CC   based on the tissues in which they are most highly expressed, and include
CC   developing products for the diagnosis or treatment of proliferative
CC   disorders, cancer, tumours, foetal and developmental abnormalities,
CC   haematopoietic disorders, diseases of the immune system, AIDS, autoimmune
CC   diseases (e.g., rheumatoid arthritis), inflammation, allergies,
CC   neurological disorders (e.g., Alzheimer's disease, Parkinson's disease),
CC   cognitive disorders, schizophrenia, asthma, skin disorders (e.g.,
CC   psoriasis), sepsis, diabetes, atherosclerosis, cardiovascular disorders,
CC   angiogenic disorders, kidney disorders, gastrointestinal disorders,
CC   pregnancy-related disorders, endocrine disorders, and infections. The
CC   proteins can also be used to aid wound healing and epithelial cell
CC   proliferation, to prevent skin aging due to sunburn, to maintain organs
CC   before transplantation, for supporting cell culture of primary tissues,
CC   to regenerate tissues, to identify their cognate ligands or binding
CC   partners, and in chemotaxis, and can be used as a food additive or
CC   preservative to modify storage properties. Antibodies specific for a
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CC   protein of the invention can be used in alleviating symptoms associated
CC   with the disorders mentioned above, and in diagnostic immunoassays e.g.,
CC   radioimmunoassay or enzyme linked immunosorbent assay (ELISA). The
CC   present sequence represents a human secreted protein-encoding cDNA of the
CC   invention
XX
SQ   Sequence 2329 BP; 782 A; 435 C; 395 G; 717 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 5;  Length 2329;
  Best Local Similarity   66.4%;  Pred. No. 0.0002;
  Matches   95;  Conservative    0;  Mismatches   48;  Indels    0;  Gaps    0;

Qy       2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
             ||  |||| |   | | |    | |||  |   |      | |   |   || ||||||
Db       2182 AAGTATTCTAAGTACTCAAATTCCTTGAATGTTCTTATGTACAAATATGCTGATTAATTA 2241

Qy       2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
             |||  ||   |||  | | |          ||||||||||||||||||||||||||||||||
Db       2242 AAAGGTCCCTCTTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2301

Qy       2220 AAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||
Db       2302 AAAAAAAAAAAAAAAAAAAAAA 2324


RESULT 279
ABQ54904
ID   ABQ54904 standard; cDNA; 2343 BP.
XX
AC   ABQ54904;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HMABL01 cDNA, SEQ ID NO:784.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   P-PSDB; ABP41827.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT   cancer), immune disorders, cardiovascular disorders and neurological
PT   diseases.
XX
PS   Claim 1; SEQ ID NO 784; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
CC   sequence represents cDNA encoding a human ovarian antigen of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 2343 BP; 568 A; 637 C; 662 G; 476 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 6;  Length 2343;
  Best Local Similarity   72.3%;  Pred. No. 0.0002;
  Matches   86;  Conservative    0;  Mismatches   33;  Indels    0;  Gaps    0;

Qy       2124 TTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCT 2183
             ||| ||||  |  |    || || | | ||| |  ||||   || |    |||
Db       2210 TTGTTTTAGGAAACCAGGCTGTTTTGTGAATAAAACGAATGCATGTTTGTGTCACGAAAA 2269

Qy       2184 CCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2270 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2328


RESULT 280
ABQ54342
ID   ABQ54342 standard; cDNA; 2755 BP.
XX
AC   ABQ54342;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HNOAX46 cDNA, SEQ ID NO:222.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
```

PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Birse CE, Rosen CA;
XX
DR WPI; 2002-147878/19.
DR P-PSDB; ABP41265.
XX
PT Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT cancer), immune disorders, cardiovascular disorders and neurological
PT diseases.
XX
PS Claim 1; SEQ ID NO 222; 2922pp; English.
XX
CC The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC encompasses polypeptides 90% identical and polynucleotides 95% identical
CC to the sequences of the invention. The invention additionally relates to
CC recombinant vectors and host cells comprising human ovarian antigen
CC polynucleotides, antibodies against human ovarian antigens, and the use
CC of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC treating, prognosing or preventing various ovary and/or breast-related
CC disorders. Such conditions include ovarian cancer and breast cancer, and
CC metastatic tumours of ovarian or breast origin, reproductive system
CC disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC vaginitis), immune disorders (e.g., congenital and acquired
CC immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC respiratory disorders, neurological disorders, gastrointestinal disorders
CC and urinary system disorders. Ovarian antigen polypeptides and
CC polynucleotides may also be used in screening for compounds which
CC modulate ovarian antigen expression or activity. The polynucleotides may
CC further be used for gene therapy, chromosome mapping, in the
CC identification of individuals and in forensic analysis, and the
CC polypeptides may be used as food additives or to prepare antibodies
CC useful in disease diagnosis, drug targeting and phenotyping. The present
CC sequence represents cDNA encoding a human ovarian antigen of the
CC invention. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 2755 BP; 751 A; 749 C; 523 G; 728 T; 0 U; 4 Other;

Query Match 3.0%; Score 66.8; DB 6; Length 2755;
Best Local Similarity 66.4%; Pred. No. 0.00021;
Matches 95; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
Db 2583 ATTTATTTAAAAGAAAAAAAAACTTTTTGTAACGACTATTTGCAGTTTAAAAATCAATAA 2642

Qy 2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
Db 2643 ACCCCGTTTTTTCAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2702

Qy 2220 AAAAAAAAAAAAAAAAAAAAAA 2242
Db 2703 AAAAAAAAAAAAAAAAAAAAAA 2725

RESULT 281
AAF18172
ID AAF18172 standard; DNA; 3144 BP.
XX
AC AAF18172;
XX
DT 14-MAR-2001 (first entry)
XX
DE Lung cancer associated polynucleotide sequence SEQ ID 191.
XX
KW Human; lung cancer associated protein; neuroprotective; cytostatic;
KW cardioactive; immunomodulatory; muscular active; vulnerary;
KW gastrointestinal; nephrotropic; antiinfective; gynecological;
KW antibacterial; diagnosis; neural disorder; immune disorder; reproductive;
KW proliferative disorder; wound healing; infectious disease; ds.
XX
OS Homo sapiens.
XX
PN WO200055180-A2.
XX
PD 21-SEP-2000.
XX
PF 08-MAR-2000; 2000WO-US005918.
XX
PR 12-MAR-1999; 99US-0124270P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
PA (ROSE/) ROSEN C A.
XX
PI Ruben SM;
XX
DR WPI; 2000-587514/55.
DR P-PSDB; AAB58296.
XX
PT Lung cancer associated gene sequences, referred to as lung cancer
PT antigens, useful for treatment, prevention, and diagnosis of disorders
PT such as lung cancer.
XX
PS Claim 1; Page 656-657; 1425pp; English.
XX
CC Polynucleotide sequences AAF17982 - AAF18424 encode human lung cancer
CC associated proteins represented in AAB58106 - AAB58548. Lung cancer
CC associated proteins and polynucleotide sequences, their agonists, and
CC antagonists may have neuroprotective; cytostatic; cardioactive;
CC immunomodulatory; muscular active general; vulnerary; gastrointestinal
CC general; nephrotropic; antiinfective; gynecological; or antibacterial
CC activity. The invention also includes antibodies specific for the protein
CC or polynucleotide sequences. The lung cancer associated polynucleotide
CC sequences may be used for detection of lung cancer, chromosome
CC identification, as chromosome markers, and for numerous other diagnostic
CC or research purposes. The proteins may be used to treat disorders such as
CC neural, immune, muscular, reproductive, gastrointestinal, pulmonary,
CC cardiovascular, renal, and proliferative disorders. The proteins may also
CC be used in the treatment of wounds and infectious diseases.
CC Polynucleotide sequences AAF18425 - AAF18433 and peptide AAB58549 are
CC used in the course of the invention for the identification and
CC characterisation of the polynucleotide and protein sequences
XX
SQ Sequence 3144 BP; 835 A; 877 C; 631 G; 796 T; 0 U; 5 Other;

Query Match 3.0%; Score 66.8; DB 3; Length 3144;
Best Local Similarity 66.4%; Pred. No. 0.00022;
Matches 95; Conservative 0; Mismatches 48; Indels 0; Gaps 0;

Qy 2100 AATCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAA 2159
Db 2971 ATTTATTTAAAAGAAAAAAAAACTTTTTGTAACGACTATTTGCAGTTTAAAAATCAATAA 3030

Qy 2160 AAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2219
Db 3031 ACCCCGTTTTTTCAAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 3090

Qy 2220 AAAAAAAAAAAAAAAAAAAAAA 2242
Db 3091 AAAAAAAAAAAAAAAAAAAAAA 3113

RESULT 282
ABK28362/c
ID ABK28362 standard; DNA; 6155 BP.
XX
AC ABK28362;
XX

```
DT   23-APR-2002  (first entry)
XX
DE   DNA transcription associated complementary genomic DNA #118.
XX
KW   DNA transcription associated gene; peptide nucleic acid; PNA-oligomer;
KW   PNA; cytosine methylation state; SNP; retroviral infection; gene; ds;
KW   single nucleotide polymorphism; adenosine deaminase deficiency; cancer;
KW   viral infection; Sezary syndrome; haematological disorder; tuberculosis;
KW   immunological disorder; Werner syndrome; developmental disorder;
KW   psoriasis; Rieger's syndrome; neurological disorder; erythropoiesis;
KW   neurodegenerative disorder; Waardenburg syndrome; Niemann-Pick disease;
KW   myelodysplastic syndrome; myocardial infarction; hypertension; arthritis;
KW   angiogenesis; congenital heart disease; HDR syndrome; gene therapy;
KW   polyglutamine disorder; solid tumour.
XX
OS   Unidentified.
XX
PN   WO200192565-A2.
XX
PD   06-DEC-2001.
XX
PF   06-APR-2001; 2001WO-EP003973.
XX
PR   06-APR-2000; 2000DE-01019058.
PR   07-APR-2000; 2000DE-01019173.
PR   30-JUN-2000; 2000DE-01032529.
PR   01-SEP-2000; 2000DE-01043826.
XX
PA   (EPIG-) EPIGENOMICS AG.
XX
PI   Olek A,  Piepenbrock C,  Berlin K;
XX
DR   WPI; 2002-090046/12.
XX
PT   New nucleic acids or oligomers, useful for diagnosing or treating
PT   diseases associated with DNA transcription, e.g. immunological disorders,
PT   Werner syndrome, psoriasis, myocardial infarction, solid tumors or
PT   cancer.
XX
PS   Claim 1; SEQ ID NO 236; 32pp; English.
XX
CC   The invention relates to a nucleic acid, which comprises a segment of the
CC   chemically pretreated DNA of genes associated with DNA transcription from
CC   one of 346 sequences, and an oligomer, in particular an oligonucleotide
CC   or peptide nucleic acid (PNA)-oligomer that hybridises to or is identical
CC   to the chemically pretreated DNA of genes associated with DNA
CC   transcription. The set of oligomer probes are useful for detecting the
CC   cytosine methylation state and/or single nucleotide polymorphisms (SNPs)
CC   in a chemically pretreated genomic DNA. The nucleic acids are useful for
CC   diagnosing or treating diseases associated with DNA transcription
CC   (particularly with the methylation status), e.g. adenosine deaminase
CC   deficiency, viral infection, retroviral infection, Sezary syndrome,
CC   haematological disorders, immunological disorders, Werner syndrome,
CC   tuberculosis, developmental disorders, psoriasis, Rieger's syndrome,
CC   neurological disorders, neurodegenerative disorders, Waardenburg
CC   syndrome, Niemann-Pick disease, myelodysplastic syndrome, myocardial
CC   infarction, hypertension, angiogenesis, erythropoiesis, congenital heart
CC   disease, HDR syndrome, arthritis, polyglutamine disorders, solid tumours
CC   or cancer. Sequences ABK28127-ABK28472 represent DNA transcription
CC   associated genomic DNA molecules of the invention. Note: The sequence
CC   data for this patent did not form part of the printed specification but
CC   was obtained in electronic format directly from the European Patent
CC   Office
XX
SQ   Sequence 6155 BP; 1620 A; 137 C; 1268 G; 3130 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.8;  DB 6;  Length 6155;
  Best Local Similarity   81.1%;  Pred. No. 0.00027;
  Matches   77;  Conservative    0;  Mismatches   18;  Indels    0;  Gaps    0;

Qy       2148 TCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAA 2207
             ||| | ||  | | || |  ||||| || |||       ||||||||||||||||||||
Db       1236 TCTAACTACGACATATCTACGTCTCTACTACTCTAAAAAAAAAAAAAAAAAAAAAAAAAAA 1177

Qy       2208 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||
Db       1176 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1142


RESULT 283
ADI73348/c
ID   ADI73348 standard; DNA; 291 BP.
XX
AC   ADI73348;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #6090.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 6090; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
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CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 291 BP; 85 A; 17 C; 25 G; 133 T; 0 U; 31 Other;

  Query Match             3.0%;  Score 66.6;  DB 5;  Length 291;
  Best Local Similarity   72.9%;  Pred. No. 0.00011;
  Matches   78;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
             | ||| | |||||       |  ||||| |   |    | | |   |  |||||||||
Db        165 TTTTTNCCTTTATNANNNATAATAAAATTTNATTAAANAATATTNAATNAAAAAAAAAAA 106

Qy       2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        105 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 59


RESULT 284
ADL38479/c
ID   ADL38479 standard; DNA; 291 BP.
XX
AC   ADL38479;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #12369.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 12369; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 291 BP; 85 A; 17 C; 25 G; 133 T; 0 U; 31 Other;

  Query Match             3.0%;  Score 66.6;  DB 5;  Length 291;
  Best Local Similarity   72.9%;  Pred. No. 0.00011;
  Matches   78;  Conservative    0;  Mismatches   29;  Indels    0;  Gaps    0;

Qy       2136 TCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAA 2195
             | ||| | |||||       |  ||||| |   |    | | |   |  |||||||||
Db        165 TTTTTNCCTTTATNANNNATAATAAAATTTNATTAAANAATATTNAATNAAAAAAAAAAA 106

Qy       2196 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||||||||||||
Db        105 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 59


RESULT 285
ABK09625
ID   ABK09625 standard; cDNA; 310 BP.
XX
AC   ABK09625;
XX
DT   14-MAR-2002  (first entry)
XX
DE   Human ovarian tumour protein encoding cDNA #162.
XX
KW   Human; ovarian tumour protein; cancer; cytostatic; immunostimulant; ss;
KW   gene therapy; CD4+ T cell; CD8+ T cell; PCR primer.
XX
OS   Homo sapiens.
XX
PN   WO200190154-A2.
XX
PD   29-NOV-2001.
XX
PF   23-MAY-2001; 2001WO-US016895.
XX
PR   24-MAY-2000; 2000US-0207107P.
PR   13-JUN-2000; 2000US-0211457P.
PR   21-JUN-2000; 2000US-0213673P.
PR   03-AUG-2000; 2000US-0223288P.
PR   01-MAR-2001; 2001US-0272790P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Xu J,  Mitcham JL,  Harlocker SL,  Dillon DC,  Secrist H,  Lodes MJ;
PI   Algate PA,  Fling SP,  Mannion J,  Benson DR,  Carter D;
XX
DR   WPI; 2002-097641/13.
XX
PT   New isolated polynucleotide encoding polypeptide comprising portion of
PT   ovarian tumor protein, useful for detection, diagnosis and therapy of
PT   human ovarian cancer.
XX
PS   Claim 1; Page 176; 285pp; English.
```

```
XX
CC   The invention relates to an isolated polynucleotide encoding a
CC   polypeptide comprising a portion of an ovarian tumour protein. The
CC   sequences of the invention are useful for stimulating an immune response
CC   and for treating ovarian cancer in a patient. An antigen presenting cell
CC   that expresses the sequences is useful for treating ovarian cancer by
CC   incubating CD4+ and/or CD8+ T cells isolated from a patient. The T cells
CC   can then be proliferated and administered to the patient to inhibit the
CC   development of cancer. The DNA sequences are useful as probes or primers
CC   for nucleic acid hybridisation, to direct expression of a polypeptide in
CC   appropriate host cells. Detecting the presence of a cancer in a patient
CC   involves obtaining a biological sample from the patient, contacting the
CC   biological sample with an agent that binds to the protein, detecting the
CC   amount of protein that binds to the agent, comparing the amount of
CC   protein to a predetermined cut-off value and determining the presence of
CC   cancer. Sequences ABK09464-ABK09802 represent PCR primers and cDNA
CC   molecules encoding ovarian tumour proteins of the invention
XX
SQ   Sequence 310 BP; 144 A; 58 C; 43 G; 64 T; 0 U; 1 Other;

  Query Match             3.0%;  Score 66.6;  DB 6;  Length 310;
  Best Local Similarity   79.6%;  Pred. No. 0.00012;
  Matches   78;  Conservative    0;  Mismatches   20;  Indels    0;  Gaps    0;

Qy       2145 TTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAA 2204
             || |   | |||||||  ||   |||  | |||||      ||||||||||||||||||
Db        179 TTTTTAAAAAAATAAAACAGTATCTCTTAATCACTGGAAAAAAAAAAAAAAAAAAAAAAAA 238

Qy       2205 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
             ||||||||||||||||||||||||||||||||||||||||
Db        239 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 276


RESULT 286
ADL43918/c
ID   ADL43918 standard; DNA; 390 BP.
XX
AC   ADL43918;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #17808.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
PR   07-JUL-2000; 2000US-0216820P.
PR   25-JUL-2000; 2000US-0220661P.
PR   21-DEC-2000; 2000US-0257672P.
XX
PA   (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI   Lee J,  Lillie J;
XX
DR   WPI; 2001-611502/70.
XX
PT   Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT   cancer cells as compared to their normal non-cancerous ovarian cells are
PT   used to characterize stage, grade, histological type of ovarian cancer.
XX
PS   Disclosure; SEQ ID NO 17808; 106pp; English.
XX
CC   The invention relates to nucleic acid markers which are overexpressed in
CC   ovarian cancer cells as compared to their expression in normal (i.e. non-
CC   cancerous) ovarian cells. The invention also relates to polypeptides
CC   encoded by the markers, antibodies that selectively bind to the
CC   polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC   of developing ovarian cancer involving inhibiting expression of a gene
CC   corresponding to a marker of the invention and a method of treating a
CC   patient afflicted with ovarian cancer comprising providing to cells of
CC   the patient an antisense oligonucleotide complementary to a marker of the
CC   invention. The markers are useful for assessing if a patient is afflicted
CC   with ovarian cancer, which involves comparing the level of expression of
CC   a marker in a patient sample and a normal level of expression of the
CC   marker in a control non-ovarian cancer sample. A difference between the
CC   expression levels indicates ovarian cancer. The level of expression of a
CC   marker corresponds to a secreted protein or to a transcribed
CC   polynucleotide or its portion. The level of expression of the marker is
CC   assessed by detecting the presence in the sample, a protein or protein
CC   fragment corresponding to the marker. The presence of protein or protein
CC   fragment is detected using an antibody that specifically binds with the
CC   protein or protein fragment. Alternatively, the level of expression of
CC   the marker is assessed by detecting the presence of a transcribed
CC   polynucleotide which anneals with the marker or anneals with a portion of
CC   the polynucleotide comprising the marker, under stringent conditions. The
CC   marker is also used for monitoring the progression of ovarian cancer in a
CC   patient which involves detecting expression of the marker in a patient
CC   sample at a first point in time, repeating the method at a subsequent
CC   time and comparing the level of expression. The method is carried out
CC   using an ovarian tissue sample. A composition comprising a marker,
CC   polypeptide or antibody of the invention is used to treat ovarian cancer.
CC   This sequence represents a human ovarian cancer DNA marker of the
CC   invention.
XX
SQ   Sequence 390 BP; 117 A; 32 C; 47 G; 194 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 5;  Length 390;
  Best Local Similarity   67.4%;  Pred. No. 0.00012;
  Matches   93;  Conservative    0;  Mismatches   45;  Indels    0;  Gaps    0;

Qy       2105 TTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATG 2164
             ||  ||  ||  |     |||  |||     || |||  |||| | |||  ||| ||||
Db        319 TTGTATAAAAAAAATAATTTTTATTTTTTTCTTTTTTTTTTTTTTTAAAAATTAAAAAA 260

Qy       2165 TTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2224
               |    |    |   |  ||||||||||||||||||||||||||||||||||||||
Db        259 ATTAATTTTTTTTTTTTTTTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 200

Qy       2225 AAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||
Db        199 AAAAAAAAAAAAAAAAAA 182


RESULT 287
ADL43518/c
ID   ADL43518 standard; DNA; 445 BP.
XX
AC   ADL43518;
XX
DT   20-MAY-2004  (first entry)
XX
DE   Human ovarian cancer DNA marker #17408.
XX
KW   Human; ovarian cancer; ds; tumour; cytostatic; DNA marker.
XX
OS   Homo sapiens.
XX
PN   WO200170979-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009126.
XX
PR   21-MAR-2000; 2000US-0191031P.
PR   25-MAY-2000; 2000US-0207124P.
PR   15-JUN-2000; 2000US-0211940P.
```

PR 07-JUL-2000; 2000US-0216820P.
PR 25-JUL-2000; 2000US-0220661P.
PR 21-DEC-2000; 2000US-0257672P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lee J, Lillie J;
XX
DR WPI; 2001-611502/70.
XX
PT Novel isolated nucleic acid molecules (markers) overexpressed in ovarian
PT cancer cells as compared to their normal non-cancerous ovarian cells are
PT used to characterize stage, grade, histological type of ovarian cancer.
XX
PS Disclosure; SEQ ID NO 17408; 106pp; English.
XX
CC The invention relates to nucleic acid markers which are overexpressed in
CC ovarian cancer cells as compared to their expression in normal (i.e. non-
CC cancerous) ovarian cells. The invention also relates to polypeptides
CC encoded by the markers, antibodies that selectively bind to the
CC polypeptides, a method of inhibiting ovarian cancer in a patient at risk
CC of developing ovarian cancer involving inhibiting expression of a gene
CC corresponding to a marker of the invention and a method of treating a
CC patient afflicted with ovarian cancer comprising providing to cells of
CC the patient an antisense oligonucleotide complementary to a marker of the
CC invention. The markers are useful for assessing if a patient is afflicted
CC with ovarian cancer, which involves comparing the level of expression of
CC a marker in a patient sample and a normal level of expression of the
CC marker in a control non-ovarian cancer sample. A difference between the
CC expression levels indicates ovarian cancer. The level of expression of a
CC marker corresponds to a secreted protein or to a transcribed
CC polynucleotide or its portion. The level of expression of the marker is
CC assessed by detecting the presence in the sample, a protein or protein
CC fragment corresponding to the marker. The presence of protein or protein
CC fragment is detected using an antibody that specifically binds with the
CC protein or protein fragment. Alternatively, the level of expression of
CC the marker is assessed by detecting the presence of a transcribed
CC polynucleotide which anneals with the marker or anneals with a portion of
CC the polynucleotide comprising the marker, under stringent conditions. The
CC marker is also used for monitoring the progression of ovarian cancer in a
CC patient which involves detecting expression of the marker in a patient
CC sample at a first point in time, repeating the method at a subsequent
CC time and comparing the level of expression. The method is carried out
CC using an ovarian tissue sample. A composition comprising a marker,
CC polypeptide or antibody of the invention is used to treat ovarian cancer.
CC This sequence represents a human ovarian cancer DNA marker of the
CC invention.
XX
SQ Sequence 445 BP; 153 A; 41 C; 56 G; 195 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 5; Length 445;
Best Local Similarity 69.2%; Pred. No. 0.00013;
Matches 90; Conservative 0; Mismatches 40; Indels 0; Gaps 0;

Qy 2113 AATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTC 2172
Db 246 AATTTTTTTTTTTTTTTCCCCCCCCTTTCTTTAAAAATTTTTTCCAAAAAACTTTTTTTT 187

Qy 2173 CACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2232
Db 186 TTTTTTTAACAAAAAAAAAAAAAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAA 127

Qy 2233 AAAAAAAAAA 2242
Db 126 AAAAAAAAAA 117

RESULT 288
ACN50953/c
ID ACN50953 standard; cDNA; 458 BP.
XX
AC ACN50953;
XX
DT 02-DEC-2004 (first entry)
XX
DE Cotton androecium tissue EST Clone ID: LIB3828-002-Q1-N6-E1, SEQ:5734.
XX
KW Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW genetic mapping; molecular mapping; seed germination; plant growth;
KW plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS Gossypium hirsutum.
XX
PN US2004123340-A1.
XX
PD 24-JUN-2004.
XX
PF 12-DEC-2001; 2001US-00021323.
XX
PR 14-DEC-2000; 2000US-0255619P.
XX
PA (DEIK/) DEIKMAN J.
PA (FENG/) FENG P C C.
PA (FINC/) FINCHER K L.
PA (ZIEG/) ZIEGLER T E.
XX
PI Deikman J, Feng PCC, Fincher KL, Ziegler TE;
XX
DR WPI; 2004-479808/45.
XX
PT New isolated nucleic acid molecule that encodes a plant protein or its
PT fragment, useful for isolating a variety of agronomically significant
PT genes associated with plant growth, quality or yield, and as molecular
PT tags to map genes.
XX
PS Claim 1; SEQ ID NO 5734; 34pp; English.
XX
CC The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC from primed or non-primed seeds from variety DP50B, mature seeds from
CC variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC tissue, developing fibres, carpel walls and septa from variety
CC Nucotton33B. The invention also relates to substantially purified
CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 458 BP; 151 A; 28 C; 63 G; 216 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 13; Length 458;
Best Local Similarity 79.6%; Pred. No. 0.00013;
Matches 78; Conservative 0; Mismatches 20; Indels 0; Gaps 0;

Qy 2145 TTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAA 2204

```
              || | || ||  ||||||  ||   | || || |   |    ||||||||||||||||||
Db        148 TTCTTTTTTTTTTAAAAAAATTAAACCCCTCCCCCTTCCAAAAAAAAAAAAAAAAAAAAAA 89

Qy       2205 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
              ||||||||||||||||||||||||||||||||||||||||
Db         88 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 51


RESULT 289
ACN56190
ID   ACN56190 standard; cDNA; 498 BP.
XX
AC   ACN56190;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton androecium tissue EST Clone ID: LIB3828-032-Q6-N6-H12, SEQ:10971.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; androecium;
KW   variety Nucotton33B; library LIB3828; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 10971; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
CC   proteins or their fragments encoded by nucleic acid molecules of the
CC   invention, and to transformed plants having a nucleic acid construct
CC   comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC   molecular tags to isolate genetic regions, to isolate genes, to map
CC   genes, to determine gene function and to determining whether genes are
CC   members of a particular gene family. The nucleic acid molecules may be
CC   used for isolating a variety of agronomically significant genes
CC   associated with plant growth, quality, yield, and could also serve as
CC   links in metabolic and catabolic pathways. The nucleic acid molecules are
CC   also useful for identifying genes important in initiating and maintaining
CC   seed germination or that may be used to mitigate stresses encountered
CC   during seed germination. The ESTs additionally enable the acquisition of
CC   promoters and cis-regulatory elements which will be useful to express
CC   agronomically significant genes in these tissues and/or other tissues,
CC   and also permits the acquisition of molecular markers useful in breeding
CC   schemes, genetic and molecular mapping, and in cloning of agronomically
CC   significant genes. The nucleic acid molecules are further useful for
CC   detecting the expression level or pattern of a protein or mRNA and for
CC   detecting the presence or quantity of a protein by tissue printing. The
CC   present sequence represents a specifically claimed EST isolated from a
CC   cotton variety Nucotton33B androecium tissue cDNA library (LIB3828). The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from the US
CC   patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ   Sequence 498 BP; 207 A; 78 C; 67 G; 146 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 13;  Length 498;
  Best Local Similarity   69.2%;  Pred. No. 0.00013;
  Matches   90;  Conservative    0;  Mismatches   40;  Indels    0;  Gaps    0;

Qy       2113 AATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTC 2172
              ||||||     ||| |       ||| || | |  |||| ||       || |||   |
Db        101 AATGATTCTACTTGTTCATATTTTCTGTCATCTCCTCTTTTTTTGTTTTATTTTGAAATT 160

Qy       2173 CACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2232
              |   ||   | | ||||||||||||||||||||||||||||||||||||||||||||
Db        161 GAATGCTTTATGCTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 220

Qy       2233 AAAAAAAAAA 2242
              ||||||||||
Db        221 AAAAAAAAAA 230


RESULT 290
ACN58226
ID   ACN58226 standard; cDNA; 591 BP.
XX
AC   ACN58226;
XX
DT   02-DEC-2004  (first entry)
XX
DE   Cotton gynoecium tissue EST Clone ID: LIB3829-008-Q6-K6-G6, SEQ:13007.
XX
KW   Cotton; plant; EST; expressed sequence tag; transgenic plant; gynoecium;
KW   variety Nucotton33B; library LIB3829; molecular tag; molecular marker;
KW   genetic mapping; molecular mapping; seed germination; plant growth;
KW   plant quality; plant yield; plant breeding; tissue printing; ss.
XX
OS   Gossypium hirsutum.
XX
PN   US2004123340-A1.
XX
PD   24-JUN-2004.
XX
PF   12-DEC-2001; 2001US-00021323.
XX
PR   14-DEC-2000; 2000US-0255619P.
XX
PA   (DEIK/) DEIKMAN J.
PA   (FENG/) FENG P C C.
PA   (FINC/) FINCHER K L.
PA   (ZIEG/) ZIEGLER T E.
XX
PI   Deikman J,  Feng PCC,  Fincher KL,  Ziegler TE;
XX
DR   WPI; 2004-479808/45.
XX
PT   New isolated nucleic acid molecule that encodes a plant protein or its
PT   fragment, useful for isolating a variety of agronomically significant
PT   genes associated with plant growth, quality or yield, and as molecular
PT   tags to map genes.
XX
PS   Claim 1; SEQ ID NO 13007; 34pp; English.
XX
CC   The invention relates to 17880 cotton expressed sequence tags (ESTs;
CC   ACN45220-ACN63099). The ESTs were isolated from cDNA libraries generated
CC   from primed or non-primed seeds from variety DP50B, mature seeds from
CC   variety Coker 312 Boswell 96 Field, and androecium tissue, gynoecium
CC   tissue, developing fibres, carpel walls and septa from variety
CC   Nucotton33B. The invention also relates to substantially purified
```

CC proteins or their fragments encoded by nucleic acid molecules of the
CC invention, and to transformed plants having a nucleic acid construct
CC comprising a nucleic acid of the invention. The cotton ESTs are useful as
CC molecular tags to isolate genetic regions, to isolate genes, to map
CC genes, to determine gene function and to determining whether genes are
CC members of a particular gene family. The nucleic acid molecules may be
CC used for isolating a variety of agronomically significant genes
CC associated with plant growth, quality, yield, and could also serve as
CC links in metabolic and catabolic pathways. The nucleic acid molecules are
CC also useful for identifying genes important in initiating and maintaining
CC seed germination or that may be used to mitigate stresses encountered
CC during seed germination. The ESTs additionally enable the acquisition of
CC promoters and cis-regulatory elements which will be useful to express
CC agronomically significant genes in these tissues and/or other tissues,
CC and also permits the acquisition of molecular markers useful in breeding
CC schemes, genetic and molecular mapping, and in cloning of agronomically
CC significant genes. The nucleic acid molecules are further useful for
CC detecting the expression level or pattern of a protein or mRNA and for
CC detecting the presence or quantity of a protein by tissue printing. The
CC present sequence represents a specifically claimed EST isolated from a
CC cotton variety Nucotton33B gynoecium tissue cDNA library (LIB3829). The
CC sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from the US
CC patent office at seqdata.uspto.gov/sequence.html?DocID=US20040123340
XX
SQ Sequence 591 BP; 273 A; 74 C; 94 G; 149 T; 0 U; 1 Other;

Query Match 3.0%; Score 66.6; DB 13; Length 591;
Best Local Similarity 78.8%; Pred. No. 0.00014;
Matches 78; Conservative 0; Mismatches 21; Indels 0; Gaps 0;

Qy 2144 TTTATCTTATTAATAAAAATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAA 2203
Db 376 TTATTATTATGTAAAAGAATGTGGGTCTTCTTTGCTTGCATATCANAAAAAAAAAAAAAA 435

Qy 2204 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242
Db 436 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 474

RESULT 291
AAL15556/c
ID AAL15556 standard; cDNA; 688 BP.
XX
AC AAL15556;
XX
DT 07-DEC-2001 (first entry)
XX
DE Human breast cancer expressed polynucleotide 8013.
XX
KW Human; breast cancer; cell marker; cytostatic; ss.
XX
OS Homo sapiens.
XX
PN WO200151628-A2.
XX
PD 19-JUL-2001.
XX
PF 10-JAN-2001; 2001WO-US000798.
XX
PR 14-JAN-2000; 2000US-0176077P.
PR 14-MAR-2000; 2000US-0189167P.
PR 24-MAR-2000; 2000US-0192099P.
PR 29-MAR-2000; 2000US-0193480P.
PR 15-MAY-2000; 2000US-0205230P.
PR 09-JUN-2000; 2000US-0211315P.
PR 25-JUL-2000; 2000US-0220534P.
XX
PA (MILL-) MILLENNIUM PREDICTIVE MEDICINE INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX
DR WPI; 2001-451856/48.
XX
PT New peptide useful as a marker for the diagnosis of breast cancer.
XX
PS Claim 1; Page 1447; 3695pp; English.
XX
CC The invention relates to human breast cancer expressed polynucleotides
CC (AAL07544-AAL26789) and methods of assessing whether a patient is
CC afflicted with breast cancer by examining the correlation between the
CC expression of certain markers and the cancerous state of breast cells.
CC The polynucleotides and encoded polypeptides are potential markers for
CC detecting, diagnosing, monitoring, characterising treating and
CC potentially preventing breast cancer. The polynucleotides and encoded
CC polypeptides are also useful for isolating compounds with cytostatic
CC activity
XX
SQ Sequence 688 BP; 167 A; 70 C; 108 G; 188 T; 0 U; 155 Other;

Query Match 3.0%; Score 66.6; DB 4; Length 688;
Best Local Similarity 49.3%; Pred. No. 0.00015;
Matches 99; Conservative 0; Mismatches 102; Indels 0; Gaps 0;

Qy 2042 TTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAA 2101
Db 274 TTTTNTTNCCCCNANNNTGGCCNTCCNNNNTTTTNGNGNNAAATTTNNNNNNNNTTTNAN 215

Qy 2102 TCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAA 2161
Db 214 AAAANNTTTNNNAAANNCNTNTTTTTAAANACCCNTTTTTCCTTTTTTTTTTNAACCNCC 155

Qy 2162 ATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2221
Db 154 CCNNNAATTTTNGNNNAAAANTCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 95

Qy 2222 AAAAAAAAAAAAAAAAAAAA 2242
Db 94 AAAAAAAAAAAAAAAAAAAA 74

RESULT 292
ACN85543/c
ID ACN85543 standard; DNA; 912 BP.
XX
AC ACN85543;
XX
DT 02-DEC-2004 (first entry)
XX
DE Breast cancer related marker, seq id 6693.
XX
KW Cancer; breast; tumour; cytostatic; marker; detection; therapy; ds.
XX
OS Homo sapiens.
XX
PN US2003099974-A1.
XX
PD 29-MAY-2003.
XX
PF 18-JUL-2002; 2002US-00198846.
XX
PR 18-JUL-2001; 2001US-0306220P.
XX
PA (MILL-) MILLENNIUM PHARM INC.
XX
PI Lillie J, Xu Y, Wang Y, Steinmann K;
XX
DR WPI; 2003-787014/74.
XX
PT Novel isolated polypeptide associated with breast cancer, useful for
PT detecting presence of polypeptide in sample, as a marker for breast
PT cancer.
XX
PS Disclosure; SEQ ID NO 6693; 36pp; English.
XX
CC The invention relates to an isolated polypeptide (I) associated with

```
CC   breast cancer which is encoded by a nucleic acid molecule comprising a
CC   nucleotide sequence (S1). Further disclosed is an antibody that binds to
CC   the polypeptide of the invention. The activity of the polypeptide of the
CC   invention may be described as cytostatic. The antibody is useful for
CC   detecting the presence of (I) in a sample. Nucleic acid molecules of the
CC   invention are useful in the detection of breast tumours. (I) is useful as
CC   a marker for breast cancer and in breast cancer therapy. Sequences given
CC   in records ACN78851-ACN92934 represent nucleic acid markers associated
CC   with breast cancer. Note: The sequence listing does not form part of the
CC   specification but may be obtained in electronic format from the USPTO web
CC   site at seqdata.uspto.gov/sequence.html?DocID=20030099974
XX
SQ   Sequence 912 BP; 245 A; 101 C; 155 G; 212 T; 0 U; 199 Other;

  Query Match             3.0%;  Score 66.6;  DB 11;  Length 912;
  Best Local Similarity   49.3%;  Pred. No. 0.00016;
  Matches   99;  Conservative    0;  Mismatches  102;  Indels    0;  Gaps    0;

Qy       2042 TTTGATTGGCATAATCACTCCGGTTTGCTTTCTAGGTCCTCAAGTGCTCGTGACACATAA 2101
              |||  ||  |    |      |  |     | |  |    || |            |
Db        321 TTTTNTTNCCCCNANNNTGGCCNTCCNNNNTTTTNGNGNNAAATTTNNNNNNNNTTTNAN 262

Qy       2102 TCATTCCATCCAATGATCGCCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAA 2161
                  |     |    |     |    |||         | |  ||| | ||| | || | ||
Db        261 AAAANNTTTNNNAAANNCNTNTTTTTAAANACCCNTTTTTCCTTTTTTTTTNAACCNCC 202

Qy       2162 ATGTTGGTCTCCACCACTGNCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2221
                   | |            ||| ||||||||||||||||||||||||||||||||||
Db        201 CCNNNAATTTTNGNNNAAAANTCCNAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 142

Qy       2222 AAAAAAAAAAAAAAAAAAAAA 2242
              |||||||||||||||||||||
Db        141 AAAAAAAAAAAAAAAAAAAAA 121


RESULT 293
AAZ06226
ID   AAZ06226 standard; DNA; 936 BP.
XX
AC   AAZ06226;
XX
DT   30-SEP-1999  (first entry)
XX
DE   Human secreted protein gene No. 8.
XX
KW   Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW   diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW   developmental abnormality; foetal deficiency; blood; allergy; renal; ds;
KW   immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW   inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW   cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW   osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW   endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS   Homo sapiens.
XX
PN   WO9935158-A1.
XX
PD   15-JUL-1999.
XX
PF   06-JAN-1999;   99WO-US000108.
XX
PR   07-JAN-1998;   98US-0070657P.
PR   07-JAN-1998;   98US-0070658P.
PR   07-JAN-1998;   98US-0070692P.
PR   07-JAN-1998;   98US-0070704P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Ruben SM,  Soppet DR,  Ebner R,  Lafleur DW,  Ni J,  Brewer LA;
PI   Olsen HS,  Duan RD,  Rosen CA;
XX
DR   WPI; 1999-444190/37.
DR   P-PSDB; AAY38393, AAY38445.
XX
PT   New isolated human genes and the secreted polypeptides they encode.
XX
PS   Claim 1; Page 154; 227pp; English.
XX
CC   This sequence represents a nucleic acid molecule which encodes a secreted
CC   human protein. The gene number is given in the descriptor line. The gene
CC   can be used to generate fusion proteins by linking to the gene to a human
CC   immunoglobulin Fc portion (e.g. AAZ06210) for increasing the stability of
CC   the fused protein as compared to the human protein only. The invention
CC   relates to 36 novel genes and their fragments (nucleic acid sequences:
CC   AAZ06219-Z06263; amino acid sequences AAY38386-Y38498) which are useful
CC   for preventing, treating or ameliorating medical conditions e.g. by
CC   protein or gene therapy. Also, pathological conditions can be diagnosed
CC   by determining the amount of the new polypeptides in a sample or by
CC   determining the presence of mutations in the new polynucleotides.
CC   Specific uses are described for each of the 36 polynucleotides, based on
CC   which tissues they are most highly expressed in (see AAZ06219 for
CC   described uses)
XX
SQ   Sequence 936 BP; 396 A; 136 C; 122 G; 278 T; 0 U; 4 Other;

  Query Match             3.0%;  Score 66.6;  DB 2;  Length 936;
  Best Local Similarity   71.3%;  Pred. No. 0.00016;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
               | |||  | | ||  |    | |    | |  || | | |||   |  | |  |||||
Db        663 CTTTTCTTCTTCCTATACCTCATCACGTTTGTTTAAATAAACTGTCCTTTGGACCACAA 722

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
                | |  ||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        723 ACCCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 782

Qy       2241 AA 2242
              ||
Db        783 AA 784


RESULT 294
AAD33261
ID   AAD33261 standard; cDNA; 2022 BP.
XX
AC   AAD33261;
XX
DT   01-JUL-2002  (first entry)
XX
DE   Human secreted protein-encoding gene 5 cDNA clone HSLGU75, SEQ ID NO:35.
XX
KW   Human; secreted protein; gene therapy; human immunodeficiency virus; HIV;
KW   immune disease; autoimmune disease; anaemia; multiple sclerosis; cancer;
KW   rheumatoid arthritis; hyperproliferative disorder; melanoma; neoplasm;
KW   sezary syndrome; Gaucher's disease; neurological disease; cardiac arrest;
KW   Alzheimer's disease; Parkinson's disease; Charcot-Marie-Tooth disease;
KW   cardiovascular disorder; cerebrovascular disorder; tachycardia; angina;
KW   thrombosis; ocular disorder; corneal infection; wound healing; cardiant;
KW   vascular; thrombolytic; cytostatic; nootropic; gene; ss.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   CDS             2. .1369
FT                   /*tag=  a
FT                   /product= "Human secreted protein precursor"
FT                   /transl_except= (pos:2. .4, aa:Xaa)
FT                   /transl_except= (pos:50. .52, aa:Xaa)
FT                   /transl_except= (pos:308. .310, aa:Xaa)
FT                   /transl_except= (pos:533. .535, aa:Xaa)
FT                   /note= "Xaa equals any of the naturally occurring L-amino
FT                   acids; CDS does not include start codon"
FT                   /partial
FT   sig_peptide     2. .4
```

```
FT                   /*tag=  b
FT   mat_peptide     5. .1366
FT                   /*tag=  c
FT                   /product= "Human mature secreted protein"
XX
PN   WO200218435-A1.
XX
PD   07-MAR-2002.
XX
PF   17-JAN-2001; 2001WO-US001567.
XX
PR   28-AUG-2000; 2000US-0228084P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Komatsoulis GA,  Baker KP,  Birse CE,  Soppet DR;
PI   Olsen HS,  Moore PA,  Wei P,  Ebner R,  Duan DR,  Shi Y,  Choi GH;
PI   Fiscella M,  Ni J;
XX
DR   WPI; 2002-281060/32.
DR   P-PSDB; AAE20817.
XX
PT   Isolated nucleic acid molecule encoding a human secreted protein is used
PT   in preventing, treating or ameliorating e.g. Alzheimer's disease, cardio-
PT   /cerebrovascular disorders and multiple sclerosis.
XX
PS   Claim 1; Page 433; 504pp; English.
XX
CC   AAD33237-AAD33280 represent cDNAs corresponding to 18 human secreted
CC   protein genes, and AAE20793-AAE20836 represent the proteins they encode.
CC   AAE20837-AAE20847 represent human secreted protein fragments. The genes
CC   and their corresponding secreted proteins are useful for preventing,
CC   treating or ameliorating medical conditions, e.g., by protein or gene
CC   therapy. Pathological conditions can be diagnosed by determining the
CC   amount of the new protein in a sample or by determining the presence of
CC   mutations in the new genes. Specific uses are described for each of the
CC   18 genes, based on the tissues in which they are most highly expressed,
CC   and include developing products for the diagnosis or treatment of immune
CC   or autoimmune diseases (e.g. HIV (human immunodeficiency virus)
CC   infections, anaemia, rheumatoid arthritis and multiple sclerosis),
CC   cancers and hyperproliferative disorders (e.g. melanomas, neoplasms of
CC   the breast or liver, Sezary syndrome and Gaucher's disease), neurological
CC   diseases (e.g. Alzheimer's disease, Parkinson's disease and Charcot-
CC   Marie-Tooth disease), cardiovascular or cerebrovascular disorders (e.g.
CC   cardiac arrest, tachycardia, angina and thrombosis), infections caused by
CC   bacteria, viruses and fungi and ocular disorders (e.g. corneal
CC   infections). Secreted proteins of the invention can also be used to
CC   promote wound healing, maintain organs before transplantation, support
CC   cell culture of primary tissues, modulate differentiation of embryonic
CC   stem cells, induce mesodermal tissue to differentiate in embryos,
CC   modulate mammalian characteristics (e.g. height and weight), modulate the
CC   catabolism, anabolism, energy storage, mental state, biorhythms, cardiac
CC   rhythms, reproductive potential, hormonal levels appetite, memory and
CC   stress. They can also be used as an additive to increase or decrease
CC   storage capabilities and nutritional content of food. The present
CC   sequence represents a human secreted protein-encoding cDNA of the
CC   invention
XX
SQ   Sequence 2022 BP; 575 A; 500 C; 512 G; 427 T; 0 U; 8 Other;

  Query Match             3.0%;  Score 66.6;  DB 6;  Length 2022;
  Best Local Similarity   71.3%;  Pred. No. 0.00021;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||     | || || | | | || |   |||
Db       1834 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 1893

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       1894 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 1953

Qy       2241 AA 2242
```

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             ||
Db       1954 AA 1955


RESULT 295
ADR41309
ID   ADR41309 standard; cDNA; 2311 BP.
XX
AC   ADR41309;
XX
DT   07-OCT-2004  (first entry)
XX
DE   Human CD-like molecule HSXDF41 cDNA, SEQ ID NO:108.
XX
KW   Human; CD-like molecule; cluster of differentiation; diagnosis;
KW   prevention; immune disorder; immunodeficiency; autoimmune disorder;
KW   blood-related disorder; haematological disorder; haemostatic disorder;
KW   thrombolytic disorder; hyperproliferative disorder; cancer; tumour;
KW   apoptotic disorder; cardiovascular disorder; respiratory disorder;
KW   angiogenic disorder; neovascularisation; neurological disorder;
KW   endocrine disorder; reproductive system disorder; infectious disease;
KW   gastrointestinal disorder; drug screening; tissue regeneration;
KW   chemotaxis; gene therapy; antibody therapy; drug targeting;
KW   chromosome mapping; forensic analysis; immunophenotyping; cytostatic;
KW   haemostatic; tranquiliser; vulnerary; antiinflammatory; nephrotropic;
KW   cardiant; antiallergic; anti-HIV; antirheumatic; antiarthritic;
KW   antipsoriatic; immunosuppressive; vasotropic; nootropic; neuroprotective;
KW   antithyroid; thyromimetic; gynaecological; virucide; hepatotropic;
KW   antibacterial; dermatological; chromosome 11; gene; ss.
XX
OS   Homo sapiens.
XX
PN   WO200226930-A2.
XX
PD   04-APR-2002.
XX
PF   25-SEP-2001; 2001WO-US029838.
XX
PR   26-SEP-2000; 2000US-0235484P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Birse CE;
XX
DR   WPI; 2002-405050/43.
DR   P-PSDB; ADR41485.
XX
PT   Novel polynucleotides and polypeptides useful for treating, preventing or
PT   ameliorating cardiovascular, renal, neurovascular, and autoimmune
PT   disorders.
XX
PS   Claim 4; SEQ ID NO 108; 1243pp; English.
XX
CC   The invention relates to 167 novel human CD (cluster of differentiation)-
CC   like molecules (ADR41388-ADR41563) and to cDNAs encoding them (seqid:11)-
XX
SQ   Sequence 2311 BP; 636 A; 580 C; 584 G; 503 T; 0 U; 8 Other;

  Query Match             3.0%;  Score 66.6;  DB 7;  Length 2311;
  Best Local Similarity   71.3%;  Pred. No. 0.00022;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||     | || || | | | || |   |||
Db       2123 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2182

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2183 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2242

Qy       2241 AA 2242
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```
             ||
Db       2243 AA 2244
```

```
RESULT 296
ADA00368
ID   ADA00368 standard; cDNA; 2843 BP.
XX
AC   ADA00368;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human secreted/transmembrane polypeptide PRO 1344 cDNA.
XX
KW   ss; gene; affinity purification; human; pericyte-associated tumour;
KW   tumour; proteoglycan release; tumour necrosis factor-alpha;
KW   TNF-alpha release; glucose uptake; free fatty acid; FFA uptake.
XX
OS   Homo sapiens.
XX
PN   US2003027992-A1.
XX
PD   06-FEB-2003.
XX
PF   02-MAY-2002; 2002US-00063524.
XX
PR   30-DEC-1998;   98KR-00062142.
PR   08-MAR-1999;   99WO-US005028.
PR   14-MAY-1999;   99US-00311832.
PR   14-MAY-1999;   99WO-US010733.
PR   25-AUG-1999;   99US-00380137.
PR   25-AUG-1999;   99US-00380138.
PR   25-AUG-1999;   99US-00380139.
PR   25-AUG-1999;   99US-00380142.
PR   15-SEP-1999;   99US-00397342.
PR   18-OCT-1999;   99US-00403297.
PR   12-NOV-1999;   99US-00423844.
PR   30-DEC-1999;   99WO-US031274.
PR   18-FEB-2000; 2000WO-US004341.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005841.
PR   21-MAR-2000; 2000WO-US007532.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   22-AUG-2000; 2000US-00644848.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00664610.
PR   18-SEP-2000; 2000US-00665350.
PR   08-NOV-2000; 2000US-00709238.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001WO-US006520.
PR   22-MAR-2001; 2001US-00816744.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   30-MAY-2001; 2001US-00870574.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   29-JUN-2001; 2001US-00869599.
PR   18-JUL-2001; 2001US-00908827.
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-596342/56.
DR   P-PSDB; ADA00369.
XX
PT   New anti-PRO antibody, useful in diagnostic assays for PRO polypeptide or
PT   for affinity purification of PRO from the recombinant cell culture or
PT   natural source.
XX
PS   Disclosure; Fig 37; 239pp; English.
XX
CC   The invention relates to an antibody binding to a PRO-polypeptide. The
CC   antibody is a monoclonal or a humanised antibody. The antibody can be an
CC   antibody fragment and labelled. The antibody is useful in diagnostic
CC   assays for PRO polypeptide or for affinity purification of PRO from the
CC   recombinant cell culture or natural source. The PRO polypeptides may be
CC   used to treat pericyte-associated tumours, to stimulate the release of
CC   proteoglycans from cartilage or tumour necrosis factor-alpha (TNF-alpha)
CC   from blood and can effect glucose or free fatty acid (FFA) uptake by
CC   skeletal muscle cells. The present sequence represents cDNA encoding a
CC   human secreted/transmembrane PRO polypeptide.
XX
SQ   Sequence 2843 BP; 766 A; 696 C; 744 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 9;  Length 2843;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||    | || || | | | || |   |||
Db       2652 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2711

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2712 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2771

Qy       2241 AA 2242
              ||
Db       2772 AA 2773


RESULT 297
AAZ65034
ID   AAZ65034 standard; cDNA; 2846 BP.
XX
AC   AAZ65034;
XX
DT   05-APR-2000  (first entry)
XX
DE   Membrane-bound protein PRO1344 encoding cDNA.
XX
KW   Membrane-bound polypeptide; PRO polypeptide; LDL receptor; TIE ligand;
KW   pharmaceutical; receptor immunoadhesin; gene mapping; ss.
XX
OS   Homo sapiens.
XX
PN   WO9963088-A2.
XX
PD   09-DEC-1999.
XX
PF   02-JUN-1999;   99WO-US012252.
XX
PR   02-JUN-1998;   98US-0087607P.
PR   02-JUN-1998;   98US-0087609P.
PR   02-JUN-1998;   98US-0087759P.
PR   03-JUN-1998;   98US-0087827P.
PR   04-JUN-1998;   98US-0088021P.
PR   04-JUN-1998;   98US-0088025P.
PR   04-JUN-1998;   98US-0088028P.
PR   04-JUN-1998;   98US-0088029P.
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PR   04-JUN-1998;   98US-0088033P.
PR   04-JUN-1998;   98US-0088326P.
PR   05-JUN-1998;   98US-0088167P.
PR   05-JUN-1998;   98US-0088202P.
PR   05-JUN-1998;   98US-0088212P.
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PR   09-JUN-1998;   98US-0088655P.
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PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088741P.
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PR 24-JUN-1998; 98US-0090538P.
PR 24-JUN-1998; 98US-0090540P.
PR 24-JUN-1998; 98US-0090557P.
PR 25-JUN-1998; 98US-0090676P.
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PR 25-JUN-1998; 98US-0090690P.
PR 25-JUN-1998; 98US-0090691P.
PR 25-JUN-1998; 98US-0090694P.
PR 25-JUN-1998; 98US-0090695P.
PR 25-JUN-1998; 98US-0090696P.
PR 26-JUN-1998; 98US-0090862P.
PR 26-JUN-1998; 98US-0090863P.
PR 01-JUL-1998; 98US-0091358P.
PR 01-JUL-1998; 98US-0091360P.
PR 02-JUL-1998; 98US-0091478P.
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PR 07-JUL-1998; 98US-0091978P.
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PR 10-AUG-1998; 98US-0095929P.
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PR 11-AUG-1998; 98US-0096143P.
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PR 12-AUG-1998; 98US-0096329P.
PR 17-AUG-1998; 98US-0096757P.
PR 17-AUG-1998; 98US-0096766P.
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PR 20-AUG-1998; 98US-0097218P.
PR 24-AUG-1998; 98US-0097661P.
PR 26-AUG-1998; 98US-0097951P.
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PR 26-AUG-1998; 98US-0097971P.
PR 26-AUG-1998; 98US-0097974P.
PR 26-AUG-1998; 98US-0097978P.
PR 26-AUG-1998; 98US-0097979P.
PR 26-AUG-1998; 98US-0097986P.
PR 26-AUG-1998; 98US-0098014P.
PR 31-AUG-1998; 98US-0098525P.
PR 16-SEP-1998; 98US-0100634P.
PR 12-JAN-1999; 99US-0115565P.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker K, Chen J, Goddard A, Gurney AL, Smith V, Watanabe CK;
PI Wood WI, Yuan J;
XX
DR WPI; 2000-072883/06.
DR P-PSDB; AAY66695.
XX
PT Membrane-bound proteins and related nucleotide sequences.
XX
PS Claim 2; Fig 158; 822pp; English.
XX
CC The invention provides membrane-bound PRO polypeptides and
CC polynucleotides encoding them. The PRO sequences of the invention were
CC identified based on extracellular domain homology screening. The PRO
CC sequences have homology with proteins including LDL receptors, TIE
CC ligands and various enzymes. The membrane-bound proteins and receptor
CC molecules are useful as pharmaceutical and diagnostic agents. Receptor
CC immunoadhesins, for instance, can be used as therapeutic agents to block
CC receptor-ligand interactions. The membrane-bound proteins can also be
CC employed for screening of potential peptide or small molecule inhibitors
CC of the relevant receptor/ligand interaction. The PRO encoding sequences
CC are useful as hybridization probes, in chromosome and gene mapping and in
CC the generation of antisense RNA and DNA. PRO nucleic acid sequences will
CC also be useful for the preparation of PRO polypeptides, especially by
CC recombinant techniques
XX
SQ Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

```
  Query Match             3.0%;  Score 66.6;  DB 3;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |      ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774
```

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RESULT 298
AAS46009
ID   AAS46009 standard; cDNA; 2846 BP.
XX
AC   AAS46009;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human DNA encoding PRO polypeptide sequence #85.
XX
KW   PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep; ss;
KW   dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha;
KW   blood; chondrocyte cell; cell proliferation; cell differentiation; colon;
KW   adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder;
KW   PCR primer.
XX
OS   Homo sapiens.
XX
PN   WO200168848-A2.
XX
PD   20-SEP-2001.
XX
PF   28-FEB-2001; 2001WO-US006520.
XX
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005841.
PR   03-MAR-2000; 2000US-0187202P.
PR   06-MAR-2000; 2000US-0186968P.
PR   14-MAR-2000; 2000US-0189320P.
PR   14-MAR-2000; 2000US-0189328P.
PR   15-MAR-2000; 2000WO-US006884.
PR   21-MAR-2000; 2000US-0190828P.
PR   21-MAR-2000; 2000US-0191007P.
PR   21-MAR-2000; 2000US-0191048P.
PR   21-MAR-2000; 2000US-0191314P.
PR   28-MAR-2000; 2000US-0192655P.
PR   29-MAR-2000; 2000US-0193032P.
PR   29-MAR-2000; 2000US-0193053P.
PR   30-MAR-2000; 2000WO-US008439.
PR   04-APR-2000; 2000US-0194449P.
PR   04-APR-2000; 2000US-0194647P.
PR   11-APR-2000; 2000US-0195975P.
PR   11-APR-2000; 2000US-0196000P.
PR   11-APR-2000; 2000US-0196187P.
PR   11-APR-2000; 2000US-0196690P.
PR   11-APR-2000; 2000US-0196820P.
PR   18-APR-2000; 2000US-0198121P.
PR   18-APR-2000; 2000US-0198585P.
PR   25-APR-2000; 2000US-0199397P.
PR   25-APR-2000; 2000US-0199550P.
PR   25-APR-2000; 2000US-0199654P.
PR   03-MAY-2000; 2000US-0201516P.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
PR   30-MAY-2000; 2000WO-US014941.
PR   02-JUN-2000; 2000WO-US015264.
PR   05-JUN-2000; 2000US-0209832P.
PR   28-JUL-2000; 2000WO-US020710.
PR   22-AUG-2000; 2000US-00644848.
PR   24-AUG-2000; 2000WO-US023328.
PR   08-NOV-2000; 2000WO-US030952.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000WO-US034956.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2001-602746/68.
DR   P-PSDB; AAU29108.
XX
PT   Novel nucleic acids encoding PRO polypeptides, used to diagnose the
PT   presence of tumors, such as prostate and breast tumors, in mammals and to
PT   screen for modulators of the compounds.
XX
PS   Claim 2; Fig 169; 774pp; English.
XX
CC   Sequences AAS45925-AAS46231 represent DNA molecules encoding and PCR
CC   primers for PRO polypeptides of the invention. The sequences of the
CC   invention can be used to detect the presence of a tumour in a mammal by
CC   comparing the level of expression of a PRO polypeptide in a test sample
CC   of cells from the animal and a control sample of normal cells, whereby a
CC   higher level of expression in the test sample indicates the presence of a
CC   tumour in the mammal. Mammals include dogs, cats, cattle, horses, sheep,
CC   pigs, goats and rabbits but are preferably human. The polypeptides can be
CC   used to stimulate tumour necrosis factor (TNF) alpha release from human
CC   blood, when contacted with it. A specific polypeptide can be used to
CC   stimulate the proliferation or differentiation of chondrocyte cells. The
CC   PRO proteins can be used to determine the presence of tumours and also
CC   susceptibility to tumour development, particularly adrenal, lung, colon,
CC   breast, prostate, rectal, cervical, or liver tumours, in mammalian
CC   subjects. The oligonucleotide probes specific for the PRO nucleic acids
CC   can be used for genetic analysis of individuals with genetic disorders
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;
```

```
  Query Match             3.0%;  Score 66.6;  DB 4;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |      ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774
```

```
RESULT 299
AAF92076
ID   AAF92076 standard; cDNA; 2846 BP.
XX
AC   AAF92076;
XX
DT   15-MAY-2001  (first entry)
XX
DE   Human PRO1344 cDNA.
XX
KW   Human; PRO protein; mapping; ss.
XX
OS   Homo sapiens.
XX
```

```
PN   WO200116318-A2.
XX
PD   08-MAR-2001.
XX
PF   24-AUG-2000; 2000WO-US023328.
XX
PR   01-SEP-1999;   99WO-US020111.
PR   15-SEP-1999;   99WO-US021090.
PR   07-DEC-1999;   99US-0169495P.
PR   09-DEC-1999;   99US-0170262P.
PR   11-JAN-2000; 2000US-0175481P.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   01-MAR-2000; 2000WO-US005601.
PR   03-MAR-2000; 2000US-0187202P.
PR   21-MAR-2000; 2000US-0191007P.
PR   30-MAR-2000; 2000WO-US008439.
PR   25-APR-2000; 2000US-0199397P.
PR   22-MAY-2000; 2000WO-US014042.
PR   05-JUN-2000; 2000US-0209832P.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi CJ,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2001-183260/18.
DR   P-PSDB; AAB87544.
XX
PT   Eighty four nucleic acids encoding PRO polypeptides, useful in molecular
PT   biology, including use as hybridization probes, and in chromosome and
PT   gene mapping.
XX
PS   Claim 2; Fig 37; 278pp; English.
XX
CC   The present sequence is the coding sequence for a human PRO polypeptide
CC   (secreted and transmembrane). The PRO protein, and PRO agonists, PRO
CC   antagonists or anti-PRO antibodies are useful for preparation of a
CC   medicament useful in the treatment of a condition which is responsive to
CC   the PRO protein, agonists, antagonists or anti-PRO antibodies. The PRO
CC   protein may also be employed as molecular weight markers for protein
CC   electrophoresis. The PRO coding sequence has applications in molecular
CC   biology, including use as hybridisation probes, and in chromosome and
CC   gene mapping
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 4;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| | |      ||    | || || | | | ||  |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774


RESULT 300
AAF44180
ID   AAF44180 standard; cDNA; 2846 BP.
XX
AC   AAF44180;
XX
DT   02-APR-2001  (first entry)
XX
DE   Human PRO1344 (UNQ699) nucleotide sequence SEQ ID NO:230.
XX
KW   Human; secreted and transmembrane protein; PRO; cytostatic; cell death;
KW   cancer; chromosomal mapping; gene mapping; tissue typing;
KW   diagnostic assay; ss.
XX
OS   Homo sapiens.
XX
PN   WO200073454-A1.
XX
PD   07-DEC-2000.
XX
PF   30-MAR-2000; 2000WO-US008439.
XX
PR   02-JUN-1999;   99WO-US012252.
PR   23-JUN-1999;   99US-0141037P.
PR   07-JUL-1999;   99US-0143048P.
PR   20-JUL-1999;   99US-0144758P.
PR   26-JUL-1999;   99US-0145698P.
PR   28-JUL-1999;   99US-0146222P.
PR   17-AUG-1999;   99US-0149396P.
PR   15-SEP-1999;   99WO-US021090.
PR   15-SEP-1999;   99WO-US021547.
PR   08-OCT-1999;   99US-0158663P.
PR   30-NOV-1999;   99WO-US028313.
PR   01-DEC-1999;   99WO-US028301.
PR   16-DEC-1999;   99WO-US030095.
PR   20-DEC-1999;   99WO-US030911.
PR   05-JAN-2000; 2000WO-US000219.
PR   06-JAN-2000; 2000WO-US000376.
PR   11-FEB-2000; 2000WO-US003565.
PR   18-FEB-2000; 2000WO-US004341.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US004914.
PR   24-FEB-2000; 2000WO-US005004.
PR   02-MAR-2000; 2000WO-US005841.
PR   15-MAR-2000; 2000WO-US006884.
PR   20-MAR-2000; 2000WO-US007377.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Ashkenazi AJ,  Baker KP,  Botstein D,  Desnoyers L,  Eaton DL;
PI   Ferrara N,  Fong S,  Gerber H,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi CJ,  Gurney AL,  Kljavin IJ,  Napier MA,  Pan J,  Paoni NF;
PI   Roy MA,  Stewart TA,  Tumas D,  Watanabe CK,  Williams PM,  Wood WI;
PI   Zhang Z;
XX
DR   WPI; 2001-032160/04.
DR   P-PSDB; AAB65218.
XX
PT   PRO polynucleotides used to produce polypeptides used to target bioactive
PT   molecules such as toxins, radiolabels or antibodies, to specific cells,
PT   to cause targeted cell death.
XX
PS   Claim 2; Fig 158; 935pp; English.
XX
CC   The present invention describes human secreted and transmembrane PRO
CC   proteins. The PRO proteins have cytostatic activity. The PRO proteins can
CC   be used for targeted delivery of bioactive molecules, such as toxins,
CC   radiolabels or antibodies, that cause cell death. PRO nucleotide
CC   sequences, and their fragments, can be used as hybridisation probes, in
CC   chromosomal and gene mapping, and in the generation of anti-sense RNA and
CC   DNA. They may also be used to produce transgenic animals which are used
CC   to develop and screen therapeutically useful reagents. The PRO nucleotide
CC   and protein sequence can be used for tissue typing and in treating
CC   cancer. Anti-PRO antibodies can be used in diagnostic assays. AAF44270 to
CC   AAF44470 represent PCR primers and hybridisation probes used in the
CC   isolation of human PRO sequences. AAF44087 to AAF44269 and AAB65154 to
CC   AAB65300 represent human PRO polynucleotide and protein sequences given
CC   in the exemplification of the present invention
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;
```

```
  Query Match             3.0%;  Score 66.6;  DB 5;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |      ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774
```

RESULT 301
ABS74396
ID ABS74396 standard; cDNA; 2846 BP.
XX
AC ABS74396;
XX
DT 10-DEC-2002 (first entry)
XX
DE Human cDNA encoding secreted/transmembrane protein PRO1344.
XX
KW Human; ss; gene; secreted protein; transmembrane protein; antirheumatic;
KW antiarthritic; osteopathic; sports-related joint problem;
KW articular cartilage defect; osteoarthritis; rheumatoid arthritis.
XX
OS Homo sapiens.
XX
PN US2002119130-A1.
XX
PD 29-AUG-2002.
XX
PF 06-DEC-2001; 2001US-00006867.
XX
PR 29-OCT-1997; 97US-0063435P.
PR 29-OCT-1997; 97US-0064215P.
PR 22-APR-1998; 98US-0082797P.
PR 29-APR-1998; 98US-0083495P.
PR 15-MAY-1998; 98US-0085579P.
PR 02-JUN-1998; 98US-0087759P.
PR 04-JUN-1998; 98US-0088021P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088030P.
PR 10-JUN-1998; 98US-0088734P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088811P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088825P.
PR 11-JUN-1998; 98US-0088863P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089514P.
PR 17-JUN-1998; 98US-0089653P.
PR 19-JUN-1998; 98US-0089952P.
PR 22-JUN-1998; 98US-0090246P.
PR 24-JUN-1998; 98US-0090444P.
PR 25-JUN-1998; 98US-0090688P.
PR 25-JUN-1998; 98US-0090696P.
PR 26-JUN-1998; 98US-0090862P.
PR 02-JUL-1998; 98US-0091628P.
PR 10-AUG-1998; 98US-0096012P.
PR 17-AUG-1998; 98US-0096757P.
PR 18-AUG-1998; 98US-0096949P.
PR 18-AUG-1998; 98US-0096959P.
PR 26-AUG-1998; 98US-0097954P.
PR 26-AUG-1998; 98US-0097971P.
PR 26-AUG-1998; 98US-0097979P.
PR 01-SEP-1998; 98US-0098749P.
PR 10-SEP-1998; 98US-0099741P.
PR 10-SEP-1998; 98US-0099763P.
PR 10-SEP-1998; 98US-0099792P.
PR 10-SEP-1998; 98US-0099812P.
PR 10-SEP-1998; 98US-0099815P.
PR 16-SEP-1998; 98US-0100627P.
PR 16-SEP-1998; 98US-0100662P.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98US-0100683P.
PR 17-SEP-1998; 98US-0100684P.
PR 17-SEP-1998; 98US-0100930P.
PR 22-SEP-1998; 98US-0101279P.
PR 23-SEP-1998; 98US-0101475P.
PR 24-SEP-1998; 98US-0101738P.
PR 24-SEP-1998; 98US-0101743P.
PR 24-SEP-1998; 98US-0101916P.
PR 30-SEP-1998; 98US-0102570P.
PR 06-OCT-1998; 98US-0103449P.
PR 08-MAR-1999; 99WO-US005028.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 01-SEP-1999; 99WO-US020111.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021194.
PR 22-DEC-1999; 99WO-US030720.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 01-MAR-2000; 2000WO-US005601.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 10-NOV-2000; 2000WO-US030873.
PR 01-DEC-2000; 2000WO-US032378.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-MAR-2001; 2001WO-US006666.
PR 30-MAY-2001; 2001WO-US017443.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
XX
PA (GETH) GENENTECH INC.
XX
PI Eaton DL, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ;
PI Grimaldi JC, Gurney AL, Watanabe CK, Wood WI;
XX
DR WPI; 2002-731348/79.
DR P-PSDB; ABG95869.
XX
PT New isolated secreted and transmembrane PRO polypeptide useful for
PT modulating biological activity of a cell, or for treating sports-related
PT joint problems, osteoarthritis or rheumatoid arthritis.
XX
PS Claim 2; Fig 37; 399pp; English.
XX
CC The invention relates to an isolated secreted and transmembrane PRO
CC polypeptide having 80 % sequence identity to a sequence appearing as
CC ABG95851-ABG95934 or their associated signal peptide, or a sequence of an
CC extracellular domain of the proteins with their associated signal peptide
CC or lacking its associated signal peptide. Also included are the nucleic
CC acids encoding the proteins, vectors, host cells, fusion proteins and
CC antibodies which specifically bind to the proteins. The proteins are
CC useful for detecting a polypeptide designated as A, B, C or D in a sample
CC suspected of containing an A, B, C or D polypeptide, by contacting the
CC sample with a polypeptide designated as E, F, G, H or I (or vice versa)
CC and determining the formation of a A/E, B/F, B/G, C/H or D/I polypeptide
CC conjugate in the sample, where the formation of the conjugate is
CC indicative of the presence of an A, B, C or D polypeptide in the sample,
CC where A is a PRO10272 polypeptide, B is a PRO20110 polypeptide, C is a
CC PRO10096 polypeptide, D is a PRO19760 polypeptide, E is a PRO5801

```
CC   polypeptide, F is a PRO1 polypeptide, G is a PRO20040 polypeptide, H is a
CC   PRO20233 polypeptide and I is a PRO1890 polypeptide. The sample comprises
CC   a cell suspected of expressing the A, B, C or D polypeptide. The E, F, G,
CC   H or I polypeptide is labeled with a detectable label or is attached to a
CC   solid support. The proteins are useful for linking a bioactive molecule
CC   to a cell expressing a polypeptide designated as A, B, C or D or E, F, G,
CC   H or I. The bioactive molecule is a toxin, a radiolabel or an antibody.
CC   The bioactive molecule causes death of the cell. A, B, C, D, E, F, G, H,
CC   or I, or antibodies against them are useful for modulating a biological
CC   activity of a cell expressing a polypeptide designated as A, B, C or D or
CC   E, F, G, H, or I. The cell is killed. The proteins are useful for
CC   identifying agonists or antagonists, for the preparation of a medicament
CC   useful in the treatment of a condition which is responsive to the
CC   proteins, as molecular weight markers for protein electrophoresis
CC   purposes, and as therapeutic agents for treating sports-related joint
CC   problems, articular cartilage defects, osteoarthritis or rheumatoid
CC   arthritis. Nucleic acids encoding the proteins are useful as
CC   hybridisation probes, in chromosome and gene mapping, in the generation
CC   of anti-sense RNA and DNA, for the preparation of the proteins, to
CC   generate transgenic or knockout animals which are useful in the
CC   development and screening of therapeutic useful reagents, for chromosome
CC   identification, and in gene therapy. The antibody is useful as a
CC   therapeutic agent, in a diagnostic assay and for affinity purification of
CC   the protein from recombinant cell culture natural sources. The present
CC   sequence encodes a novel secreted or transmembrane protein of the
CC   invention
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 6;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
                |||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
                ||
Db       2773 AA 2774


RESULT 302
ACA89459
ID   ACA89459 standard; cDNA; 2846 BP.
XX
AC   ACA89459;
XX
DT   09-JUL-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #85.
XX
KW   Human; PRO polypeptide; secreted protein; transmembrane protein;
KW   chromosome mapping; gene mapping; tumour; adrenal; lung; colon; breast;
KW   prostate; rectal; cervical; liver; cancer; TNF-alpha;
KW   tumour necrosis factor-alpha; proliferation; differentiation;
KW   chondrocyte cell; bone disorder; cartilage disorder; sports injury;
KW   arthritis; cytostatic; antiarthritic; osteopathic; gene therapy; gene;
KW   ss.
XX
OS   Homo sapiens.
XX
PN   US2003036141-A1.
XX
PD   20-FEB-2003.
XX
PF   01-JUL-2002; 2002US-00187597.
XX
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   17-OCT-1997;   97US-0062250P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   28-OCT-1997;   97US-0063540P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063734P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   13-NOV-1997;   97US-0065311P.
PR   21-NOV-1997;   97US-0066120P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066772P.
PR   11-DEC-1997;   97US-0069335P.
PR   12-DEC-1997;   97US-0069425P.
PR   17-DEC-1997;   97US-0069870P.
PR   18-DEC-1997;   97US-0068017P.
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077649P.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078939P.
PR   27-MAR-1998;   98US-0079664P.
PR   27-MAR-1998;   98US-0079786P.
PR   31-MAR-1998;   98US-0080107P.
PR   31-MAR-1998;   98US-0080194P.
PR   01-APR-1998;   98US-0080327P.
PR   01-APR-1998;   98US-0080333P.
PR   08-APR-1998;   98US-0081049P.
PR   08-APR-1998;   98US-0081070P.
PR   09-APR-1998;   98US-0081195P.
PR   15-APR-1998;   98US-0081838P.
PR   21-APR-1998;   98US-0082568P.
PR   21-APR-1998;   98US-0082569P.
PR   22-APR-1998;   98US-0082704P.
PR   22-APR-1998;   98US-0082797P.
PR   28-APR-1998;   98US-0083322P.
PR   29-APR-1998;   98US-0083495P.
PR   29-APR-1998;   98US-0083496P.
PR   29-APR-1998;   98US-0083499P.
PR   29-APR-1998;   98US-0083559P.
PR   05-MAY-1998;   98US-0084366P.
PR   06-MAY-1998;   98US-0084414P.
PR   07-MAY-1998;   98US-0084639P.
PR   07-MAY-1998;   98US-0084640P.
PR   07-MAY-1998;   98US-0084643P.
PR   15-MAY-1998;   98US-0085579P.
PR   15-MAY-1998;   98US-0085580P.
PR   15-MAY-1998;   98US-0085582P.
PR   15-MAY-1998;   98US-0085700P.
PR   18-MAY-1998;   98US-0086023P.
PR   22-MAY-1998;   98US-0086392P.
PR   22-MAY-1998;   98US-0086486P.
PR   28-MAY-1998;   98US-0087098P.
PR   28-MAY-1998;   98US-0087208P.
PR   02-JUN-1998;   98US-0087609P.
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PR   03-JUN-1998;   98US-0087827P.
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

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Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

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Qy       2241 AA 2242
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Db       2773 AA 2774
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RESULT 303
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ID ACA73469 standard; cDNA; 2846 BP.
XX
AC ACA73469;
XX
DT 01-JUL-2003 (first entry)
XX
DE Human secreted/transmembrane protein (PRO) cDNA #85.
XX
KW Human; ss; gene; secreted protein; transmembrane protein; PRO; tumour;
KW proliferation; differentiation; chondrocyte cells;
KW tumour necrosis factor-alpha; TNF-alpha; blood; gene therapy.
XX
OS Homo sapiens.
XX
PN US2003036146-A1.
XX
PD 20-FEB-2003.
XX
PF 02-JUL-2002; 2002US-00187603.
XX
PR 26-JUN-1998; 98US-00105413.
PR 16-SEP-1998; 98WO-US019330.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.

PR 06-NOV-1998; 98US-00187368.
PR 01-DEC-1998; 98WO-US025108.
PR 07-DEC-1998; 98US-00202054.
PR 03-MAR-1999; 99US-00254311.
PR 08-MAR-1999; 99WO-US005028.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
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PR 25-AUG-1999; 99US-00380142.
PR 01-SEP-1999; 99WO-US020111.
PR 15-SEP-1999; 99WO-US021090.
PR 18-OCT-1999; 99US-00403297.
PR 12-NOV-1999; 99US-00423844.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028551.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 18-FEB-2000; 2000WO-US004341.
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PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
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PR 30-MAR-2000; 2000WO-US008439.
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PR 28-JUL-2000; 2000WO-US020710.
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PR 18-SEP-2000; 2000US-00665350.
PR 08-NOV-2000; 2000US-00709238.
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PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
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PR 05-JUN-2001; 2001US-00874503.
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PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 30-JUL-2001; 2001US-00918585.
PR 06-AUG-2001; 2001US-00924419.
PR 13-AUG-2001; 2001US-00929404.
PR 16-AUG-2001; 2001US-00931836.
PR 28-AUG-2001; 2001US-00941992.
PR 29-AUG-2001; 2001WO-US027099.
PR 04-SEP-2001; 2001US-00946374.
PR 15-JAN-2002; 2002US-00052586.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-332034/31.
DR P-PSDB; ABU86277.
XX
PT Three hundred and five nucleic acids encoding PRO polypeptides, useful in
PT gene therapy, chromosome identification, tissue typing, and for detecting
PT the presence of tumor in a mammal.
XX
PS Claim 2; Fig 169; 707pp; English.
XX
CC The invention relates to three hundred and five nucleic acids encoding
CC PRO polypeptides (secreted and transmembrane), sequences 80% identical to
CC them, or encoding a PRO polypeptide lacking its associated signal peptide
CC or an extracellular domain of the PRO polypeptide, with or lacking its
CC associated signal peptide. Also included are the encoded PRO proteins,
CC PRO expression vectors, host cells transformed with the vector (used to
CC produce PRO proteins), a chimaeric molecule comprising the PRO
CC polypeptide fused to a heterologous amino acid sequence, an anti-PRO
CC antibody, a method for stimulating the release of tumor necrosis factor
CC alpha (TNF-alpha) from human blood (by contacting the blood with PRO1079,
CC PRO827, PRO791, PRO1131, PRO1316, PRO1183, PRO1343, PRO1760, PRO1567 or
CC PRO4333), a method for stimulating the proliferation or differentiation
CC of chondrocyte cells by contacting the cells with a PRO6029 polypeptide,
CC a method for detecting the presence of tumour in a mammal and an
CC oligonucleotide probe derived from any of the nucleotide sequences cited
CC above. The PRO polypeptide or anti-PRO antibody is useful for preparing a
CC medicament for treating a condition that is responsive to the PRO
CC polypeptide or anti-PRO antibody. The PRO nucleotide sequences are useful
CC as hybridisation probes in chromosome and gene mapping, or in generating
CC antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO
CC polypeptides, in assays to identify other proteins or molecules involved
CC in a binding reaction, to generate transgenic animals or knockout
CC animals, which in turn are useful in the development and screening of
CC therapeutically useful reagents, for chromosome identification, and
CC tissue typing. The PRO polypeptides and nucleic acid molecules are also
CC useful for detecting the presence of a tumour in a mammal, stimulating
CC proliferation or differentiation of chondrocyte cells, stimulating the
CC release of tumour necrosis factor-alpha from human blood, in gene
CC therapy, or as molecular weight markers for protein electrophoresis
CC purposes. The anti-PRO antibodies may be used in diagnostic assays for
CC PRO, or for the affinity purification of PRO from recombinant cell
CC culture or natural sources. The present sequence is a cDNA encoding a PRO
CC protein
XX
SQ Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

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Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
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Db 2773 AA 2774

RESULT 304
ACA05784
ID ACA05784 standard; cDNA; 2846 BP.
XX
AC ACA05784;
XX
DT 29-MAY-2003 (first entry)
XX
DE Human secreted/transmembrane protein (PRO) cDNA #85.
XX
KW Human; gene; ss; secreted and transmembrane protein; PRO; TNF-alpha;
KW tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW tissue typing.
XX
OS Homo sapiens.
XX
PN US2003036162-A1.

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PD   20-FEB-2003.
XX
PF   12-JUL-2002; 2002US-00194423.
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PR   07-OCT-1998;   98US-00168978.
PR   07-OCT-1998;   98WO-US021141.
PR   06-NOV-1998;   98US-00187368.
PR   01-DEC-1998;   98WO-US025108.
PR   07-DEC-1998;   98US-00202054.
PR   03-MAR-1999;   99US-00254311.
PR   08-MAR-1999;   99WO-US005028.
PR   14-MAY-1999;   99US-00311832.
PR   14-MAY-1999;   99WO-US010733.
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PR   25-AUG-1999;   99US-00380138.
PR   25-AUG-1999;   99US-00380139.
PR   25-AUG-1999;   99US-00380142.
PR   01-SEP-1999;   99WO-US020111.
PR   15-SEP-1999;   99WO-US021090.
PR   18-OCT-1999;   99US-00403297.
PR   12-NOV-1999;   99US-00423844.
PR   01-DEC-1999;   99WO-US028301.
PR   02-DEC-1999;   99WO-US028551.
PR   30-DEC-1999;   99WO-US031274.
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PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
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PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005841.
PR   15-MAR-2000; 2000WO-US006884.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
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PR   28-JUL-2000; 2000WO-US020710.
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PR   24-AUG-2000; 2000WO-US023328.
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PR   18-SEP-2000; 2000US-00665350.
PR   08-NOV-2000; 2000US-00709238.
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PR   20-DEC-2000; 2000WO-US034956.
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PR   22-MAR-2001; 2001US-00816744.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   25-MAY-2001; 2001US-00866028.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
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PR   29-JUN-2001; 2001WO-US021066.
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PR   18-JUL-2001; 2001US-00908827.
PR   30-JUL-2001; 2001US-00918585.
PR   06-AUG-2001; 2001US-00924419.
PR   13-AUG-2001; 2001US-00929404.
PR   16-AUG-2001; 2001US-00931836.
PR   28-AUG-2001; 2001US-00941992.
PR   29-AUG-2001; 2001WO-US027099.
PR   04-SEP-2001; 2001US-00946374.
PR   15-JAN-2002; 2002US-00052586.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-332039/31.
DR   P-PSDB; ABU67490.
XX
PT   New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT   in gene therapy, in chromosome and gene mapping, as chromosome markers,
PT   in tissue typing, and in chromosome identification.
XX
PS   Claim 2; Fig 169; 706pp; English.
XX
CC   The invention discloses human nucleic acids encoding secreted and
CC   transmembrane (PRO) polypeptides. Also disclosed is an antibody that
CC   specifically binds to the PRO polypeptide, a method for stimulating the
CC   release of tumour necrosis factor alpha (TNF-alpha) from human blood by
CC   contacting the blood a PRO polypeptide, a method for stimulating the
CC   proliferation or differentiation of chondrocyte cells by contacting the
CC   cells with a PRO polypeptide, a method for detecting the presence of a
CC   tumour in a mammal and an oligonucleotide probe derived from any of the
CC   PRO nucleotide sequences. The nucleotide sequences are useful as probes,
CC   in chromosome and gene mapping, in generating antisense RNA and DNA, in
CC   preparing PRO polypeptides by recombinant techniques and in gene therapy
CC   (e.g. for replacement of defective gene). The PRO polypeptides are useful
CC   as molecular weight markers for protein electrophoresis purposes, for
CC   chromosome identification, as chromosome markers, as therapeutic agents,
CC   for stimulating the release of TNF-alpha from human blood, for
CC   stimulating the proliferation or differentiation of chondrocytes and
CC   detecting the presence of a tumour. The PRO polypeptides and nucleic
CC   acids may also be used diagnostically for tissue typing. The sequences
CC   presented in ACA05700-ACA06004 are the cDNAs encoding the PRO
CC   polypeptides of the invention
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
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Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774


RESULT 305
ACA66618
ID   ACA66618 standard; cDNA; 2846 BP.
XX
AC   ACA66618;
XX
DT   23-JUN-2003  (first entry)
XX
DE   cDNA encoding human PRO protein #85.
XX
KW   Human; tumour; adrenal; lung; colon; breast; prostate; rectal; cervical;
KW   liver; PRO; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003036137-A1.
XX
PD   20-FEB-2003.
XX
PF   27-JUN-2002; 2002US-00184640.
XX
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PR 26-JUN-1998; 98US-00105413.
PR 16-SEP-1998; 98WO-US019330.
PR 07-OCT-1998; 98US-00168978.
PR 07-OCT-1998; 98WO-US021141.
PR 06-NOV-1998; 98US-00187368.
PR 01-DEC-1998; 98WO-US025108.
PR 07-DEC-1998; 98US-00202054.
PR 03-MAR-1999; 99US-00254311.
PR 08-MAR-1999; 99WO-US005028.
PR 14-MAY-1999; 99US-00311832.
PR 14-MAY-1999; 99WO-US010733.
PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 25-AUG-1999; 99US-00380138.
PR 25-AUG-1999; 99US-00380139.
PR 25-AUG-1999; 99US-00380142.
PR 01-SEP-1999; 99WO-US020111.
PR 15-SEP-1999; 99WO-US021090.
PR 18-OCT-1999; 99US-00403297.
PR 12-NOV-1999; 99US-00423844.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028551.
PR 30-DEC-1999; 99WO-US031274.
PR 05-JAN-2000; 2000WO-US000219.
PR 18-FEB-2000; 2000WO-US004341.
PR 18-FEB-2000; 2000WO-US004342.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US005004.
PR 01-MAR-2000; 2000WO-US005601.
PR 02-MAR-2000; 2000WO-US005841.
PR 15-MAR-2000; 2000WO-US006884.
PR 30-MAR-2000; 2000WO-US008439.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 22-AUG-2000; 2000US-00644848.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00664610.
PR 18-SEP-2000; 2000US-00665350.
PR 08-NOV-2000; 2000US-00709238.
PR 08-NOV-2000; 2000WO-US030952.
PR 01-DEC-2000; 2000WO-US032678.
PR 20-DEC-2000; 2000US-00747259.
PR 20-DEC-2000; 2000WO-US034956.
PR 28-FEB-2001; 2001WO-US006520.
PR 22-MAR-2001; 2001US-00816744.
PR 10-MAY-2001; 2001US-00854208.
PR 10-MAY-2001; 2001US-00854280.
PR 25-MAY-2001; 2001US-00866028.
PR 01-JUN-2001; 2001WO-US017800.
PR 05-JUN-2001; 2001US-00874503.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 18-JUL-2001; 2001US-00908827.
PR 30-JUL-2001; 2001US-00918585.
PR 06-AUG-2001; 2001US-00924419.
PR 13-AUG-2001; 2001US-00929404.
PR 16-AUG-2001; 2001US-00931836.
PR 28-AUG-2001; 2001US-00941992.
PR 29-AUG-2001; 2001WO-US027099.
PR 04-SEP-2001; 2001US-00946374.
PR 15-JAN-2002; 2002US-00052586.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-342038/32.
DR P-PSDB; ABU80518.
XX
PT Three hundred and five nucleic acids encoding secreted and transmembrane
PT PRO polypeptides, useful for the diagnosis, prevention and/or treatment
PT of tumors, such as adrenal, lung, colon, breast, prostate, rectal,
PT cervical or liver tumors.
XX
PS Claim 2; Fig 169; 708pp; English.
XX
CC The invention relates to three hundred and five nucleic acids encoding
CC PRO polypeptides (secreted and transmembrane). Methods and compositions
CC of the present invention are useful for the diagnosis, prevention and/or
CC treatment of tumours, such as adrenal, lung, colon, breast, prostate,
CC rectal, cervical or liver tumours. The PRO polypeptides are also useful
CC as molecular weight markers, or for chromosome identification. The PRO
CC genes are useful as hybridisation probes, or for screening libraries of
CC human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene
CC therapy, particularly for replacing a defective gene. The present
CC sequence represents a cDNA encoding a human PRO polypeptide of the
CC invention
XX
SQ Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
Db 2773 AA 2774

RESULT 306
ACA64316
ID ACA64316 standard; cDNA; 2846 BP.
XX
AC ACA64316;
XX
DT 17-JUN-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW Human; secreted and transmembrane protein; cytostatic; anti-HIV;
KW virucide; hepatotropic; antiinflammatory; neuroprotective; gene therapy;
KW PRO; pharmaceutical; diagnostic; biosensor; bioreactor; malignancy;
KW cancer; ovarian cancer; colorectal cancer; Kaposi's sarcoma; leukaemia;
KW lymphoma; hepatitis B; multiple sclerosis; Crohn's disease;
KW drug screening; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003003531-A1.
XX
PD 02-JAN-2003.
XX
PF 19-NOV-2001; 2001US-00989734.
XX
PR 16-JUN-1997; 97US-0049787P.
PR 17-OCT-1997; 97US-0062250P.
PR 05-NOV-1997; 97WO-US020069.
PR 12-NOV-1997; 97US-0065186P.
PR 13-NOV-1997; 97US-0065311P.
PR 24-NOV-1997; 97US-0066770P.
PR 25-FEB-1998; 98US-0075945P.
PR 20-MAR-1998; 98US-0078910P.
PR 28-APR-1998; 98US-0083322P.

PR 07-MAY-1998; 98US-0084600P.
PR 28-MAY-1998; 98US-0087106P.
PR 02-JUN-1998; 98US-0087607P.
PR 02-JUN-1998; 98US-0087609P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088021P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088026P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088030P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088326P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088212P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088655P.
PR 10-JUN-1998; 98US-0088734P.
PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088742P.
PR 10-JUN-1998; 98US-0088810P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088858P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088876P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089440P.
PR 16-JUN-1998; 98US-0089512P.
PR 16-JUN-1998; 98US-0089514P.
PR 17-JUN-1998; 98US-0089532P.
PR 17-JUN-1998; 98US-0089538P.
PR 17-JUN-1998; 98US-0089598P.
PR 17-JUN-1998; 98US-0089599P.
PR 17-JUN-1998; 98US-0089600P.
PR 17-JUN-1998; 98US-0089653P.
PR 18-JUN-1998; 98US-0089801P.
PR 18-JUN-1998; 98US-0089907P.
PR 18-JUN-1998; 98US-0089908P.
PR 16-SEP-1998; 98WO-US019330.
PR 17-SEP-1998; 98WO-US019437.
PR 07-OCT-1998; 98WO-US021141.
PR 01-DEC-1998; 98WO-US025108.
PR 05-JAN-1999; 99WO-US000106.
PR 08-MAR-1999; 99WO-US005028.
PR 02-JUN-1999; 99WO-US012252.
PR 15-SEP-1999; 99WO-US021090.
PR 15-SEP-1999; 99WO-US021547.
PR 30-NOV-1999; 99WO-US028313.
PR 01-DEC-1999; 99WO-US028301.
PR 01-DEC-1999; 99WO-US028634.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 05-JAN-2000; 2000WO-US000219.
PR 06-JAN-2000; 2000WO-US000376.
PR 11-FEB-2000; 2000WO-US003565.
PR 18-FEB-2000; 2000WO-US004341.
PR 22-FEB-2000; 2000WO-US004414.
PR 24-FEB-2000; 2000WO-US004914.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 10-MAR-2000; 2000WO-US006319.
PR 15-MAR-2000; 2000WO-US006884.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 15-MAY-2000; 2000WO-US013358.
PR 17-MAY-2000; 2000WO-US013705.
PR 22-MAY-2000; 2000WO-US014042.
PR 30-MAY-2000; 2000WO-US014941.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 11-AUG-2000; 2000WO-US022031.
PR 23-AUG-2000; 2000WO-US023522.
PR 24-AUG-2000; 2000WO-US023328.
PR 08-NOV-2000; 2000WO-US030952.
PR 01-DEC-2000; 2000WO-US032678.
PR 28-FEB-2001; 2001WO-US006520.
PR 01-JUN-2001; 2001WO-US017800.
PR 20-JUN-2001; 2001WO-US019692.
PR 29-JUN-2001; 2001WO-US021066.
PR 09-JUL-2001; 2001WO-US021735.
PR 28-AUG-2001; 2001US-00941992.
XX
PA (GETH) GENENTECH INC.
XX
PI Ashkenazi AJ, Baker KP, Botstein D, Desnoyers L, Eaton DL;
PI Ferrara N, Fong S, Gerber H, Gerritsen ME, Goddard A, Godowski PJ;
PI Grimaldi JC, Gurney AL, Kljavin IJ, Napier MA, Pan J, Paoni NF;
PI Roy MA, Stewart TA, Tumas D, Watanabe CK, Williams PM, Wood WI;
PI Zhang Z;
XX
DR WPI; 2003-352829/33.
DR P-PSDB; ABU72509.
XX
PT New genes and secreted and transmembrane polypeptides (e.g. PRO183 or
PT PRO184), useful for treating or diagnosing e.g. ovarian cancer, Kaposi's
PT sarcoma, leukemia, lymphoma, hepatitis B, multiple sclerosis or Crohn's
PT disease.
XX
PS Claim 1; Fig 158; 663pp; English.
XX
CC The invention describes a new isolated nucleic acid molecule comprising
CC the full length coding sequence of the DNA deposited with the American
CC Type Culture Collection (e.g. ATCC Deposit No. 209621, 552-PTA, 819-PTA,
CC 209439, 203135, etc); or a sequence with at least 80% identity to a DNA
CC encoding a PRO polypeptide. The PRO polypeptides or polynucleotides are
CC useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These
CC are particularly useful for detecting or treating e.g. malignancies or
CC cancers (e.g. ovarian cancer, colorectal cancer, Kaposi's sarcoma,
CC leukaemia or lymphoma), hepatitis B, multiple sclerosis, or Crohn's
CC disease in mammals. The PRO polypeptides are useful in drug screening,
CC particularly as targets for therapeutic intervention in these diseases,
CC and in the diagnostic determination of the presence of these diseases.
CC The PRO polypeptides are also useful as molecular weight markers, or for
CC chromosome identification. The PRO genes are useful as hybridisation
CC probes, or for screening libraries of human cDNA, genomic DNA or mRNA.
CC The PRO genes may also be used in gene therapy, particularly for
CC replacing a defective gene. This sequence encodes a novel human secreted
CC and transmembrane PRO polypeptide
XX
SQ Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
||||| | || || ||| | | || | || || | | | || | ||| |
Db 2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
|||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
||
Db 2773 AA 2774

RESULT 307
ACA91182
ID ACA91182 standard; cDNA; 2846 BP.
XX
AC ACA91182;

```
XX
DT   11-JUL-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW   Human; secreted and transmembrane protein; PRO; antibody therapy;
KW   pharmaceutical; diagnostic; biosensor; bioreactor; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003018173-A1.
XX
PD   23-JAN-2003.
XX
PF   01-MAY-2002; 2002US-00063515.
XX
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-401702/38.
DR   P-PSDB; ABU90894.
XX
PT   New antibody useful for identifying PRO polypeptides, for affinity
PT   purification of PRO polypeptides, and for preparing a medicament for
PT   diagnosing or treating conditions responsive to the antibody or PRO
PT   polypeptide.
XX
PS   Disclosure; Fig 37; 345pp; English.
XX
CC   The invention describes an antibody that specifically binds to a PRO
CC   polypeptide having a fully defined amino acid sequence given in the
CC   specification. The antibody is useful in identifying PRO polypeptides
CC   useful for various industrial applications, including pharmaceuticals,
CC   diagnostics, biosensors and bioreactors. The antibody is also used for
CC   affinity purification of PRO polypeptides from recombinant cell culture
CC   or natural sources. The antibody, PRO polypeptide, or its agonists or
CC   antagonists, may be used for preparing a medicament for diagnosing or
CC   treating a condition responsive to the antibody, PRO polypeptide, or its
CC   agonists or antagonists. This sequence encodes a novel human secreted and
CC   transmembrane PRO polypeptide
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
                ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
                ||
Db       2773 AA 2774


RESULT 308
ACD81559
ID   ACD81559 standard; cDNA; 2846 BP.
XX
AC   ACD81559;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Human cDNA encoding secreted/transmembrane protein PRO1344.
XX
KW   Human; ss; gene; secreted/transmembrane protein; PRO; tumour; cancer;
KW   cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2003009013-A1.
XX
PD   09-JAN-2003.
XX
PF   01-MAY-2002; 2002US-00063519.
XX
PR   30-DEC-1998;   98KR-00062142.
PR   08-MAR-1999;   99WO-US005028.
PR   14-MAY-1999;   99US-00311832.
PR   14-MAY-1999;   99WO-US010733.
PR   25-AUG-1999;   99US-00380137.
PR   25-AUG-1999;   99US-00380138.
PR   25-AUG-1999;   99US-00380139.
PR   25-AUG-1999;   99US-00380142.
PR   15-SEP-1999;   99US-00397342.
PR   18-OCT-1999;   99US-00403297.
PR   12-NOV-1999;   99US-00423844.
PR   30-DEC-1999;   99WO-US031274.
PR   18-FEB-2000; 2000WO-US004341.
PR   01-MAR-2000; 2000WO-US005601.
PR   02-MAR-2000; 2000WO-US005841.
PR   21-MAR-2000; 2000WO-US007532.
PR   22-MAY-2000; 2000WO-US014042.
PR   02-JUN-2000; 2000WO-US015264.
PR   22-AUG-2000; 2000US-00644848.
PR   24-AUG-2000; 2000WO-US023328.
PR   18-SEP-2000; 2000US-00664610.
PR   18-SEP-2000; 2000US-00665350.
PR   08-NOV-2000; 2000US-00709238.
PR   10-NOV-2000; 2000WO-US030873.
PR   01-DEC-2000; 2000WO-US032678.
PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001WO-US006520.
PR   22-MAR-2001; 2001US-00816744.
PR   10-MAY-2001; 2001US-00854208.
PR   10-MAY-2001; 2001US-00854280.
PR   30-MAY-2001; 2001US-00870574.
PR   01-JUN-2001; 2001WO-US017800.
PR   05-JUN-2001; 2001US-00874503.
PR   29-JUN-2001; 2001US-00869599.
PR   18-JUL-2001; 2001US-00908827.
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-447384/42.
DR   P-PSDB; ABO33953.
XX
PT   New isolated antibody specifically binding a PRO polypeptide, useful for
PT   the preparation of a medicament for treating disorders with the aberrant
PT   expression or activity of the PRO polypeptide, such as tumor conditions
PT   and cancer.
XX
PS   Disclosure; Fig 37; 223pp; English.
XX
CC   The invention relates to an antibody that binds to a secreted or
CC   transmembrane protein designated PRO1446 appearing as ABO33941. The
CC   protein is one of 84 PRO polypeptides which (along with their encoding
CC   nucleic acids) are disclosed in the specification. The methods and
CC   compositions of the present invention are useful for the preparation of a
CC   medicament for the treatment of disorders associated with the aberrant
CC   expression or activity of the PRO polypeptide, such as tumour conditions
CC   and cancer. They can also be used to generate transgenic or knockout
```

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CC   animals useful in the development and screening of therapeutically useful
CC   reagents. The PRO polypeptides and encoding nucleic acids can be used as
CC   molecular weight markers for protein electrophoresis, chromosome
CC   identification and tissue typing. The antibodies may be used in various
CC   diagnostic, competitive binding and/or immunoprecipitation assays. The
CC   present sequence encodes a PRO polypeptide
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
             ||||| | || ||  ||| |  |       ||    | || || | | | || |   |||
Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
                ||
Db       2773 AA 2774


RESULT 309
ACF20193
ID   ACF20193 standard; cDNA; 2846 BP.
XX
AC   ACF20193;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW   KW Human; PRO; secreted protein; transmembrane protein;
KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003040063-A1.
XX
PD   27-FEB-2003.
XX
PF   26-JUN-2002; 2002US-00183006.
XX
PR   18-SEP-1997;   97US-0059263P.
PR   18-SEP-1997;   97US-0059266P.
PR   17-OCT-1997;   97US-0062250P.
PR   21-OCT-1997;   97US-0063486P.
PR   24-OCT-1997;   97US-0063120P.
PR   24-OCT-1997;   97US-0063121P.
PR   28-OCT-1997;   97US-0063540P.
PR   28-OCT-1997;   97US-0063541P.
PR   28-OCT-1997;   97US-0063544P.
PR   28-OCT-1997;   97US-0063564P.
PR   29-OCT-1997;   97US-0063734P.
PR   31-OCT-1997;   97US-0063870P.
PR   31-OCT-1997;   97US-0064103P.
PR   13-NOV-1997;   97US-0065311P.
PR   21-NOV-1997;   97US-0066120P.
PR   24-NOV-1997;   97US-0066466P.
PR   24-NOV-1997;   97US-0066772P.
PR   11-DEC-1997;   97US-0069335P.
PR   12-DEC-1997;   97US-0069425P.
PR   17-DEC-1997;   97US-0069870P.
PR   18-DEC-1997;   97US-0068017P.
PR   10-MAR-1998;   98US-0077450P.
PR   11-MAR-1998;   98US-0077632P.
PR   11-MAR-1998;   98US-0077649P.
PR   20-MAR-1998;   98US-0078886P.
PR   20-MAR-1998;   98US-0078939P.
PR   27-MAR-1998;   98US-0079664P.
PR   27-MAR-1998;   98US-0079786P.
PR   31-MAR-1998;   98US-0080107P.
PR   31-MAR-1998;   98US-0080194P.
PR   01-APR-1998;   98US-0080327P.
PR   01-APR-1998;   98US-0080333P.
PR   08-APR-1998;   98US-0081049P.
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PR   15-APR-1998;   98US-0081838P.
PR   21-APR-1998;   98US-0082568P.
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PR   22-APR-1998;   98US-0082704P.
PR   22-APR-1998;   98US-0082797P.
PR   28-APR-1998;   98US-0083322P.
PR   29-APR-1998;   98US-0083495P.
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PR   05-MAY-1998;   98US-0084366P.
PR   06-MAY-1998;   98US-0084414P.
PR   07-MAY-1998;   98US-0084639P.
PR   07-MAY-1998;   98US-0084640P.
PR   07-MAY-1998;   98US-0084643P.
PR   15-MAY-1998;   98US-0085579P.
PR   15-MAY-1998;   98US-0085580P.
PR   15-MAY-1998;   98US-0085582P.
PR   15-MAY-1998;   98US-0085700P.
PR   18-MAY-1998;   98US-0086023P.
PR   22-MAY-1998;   98US-0086392P.
PR   22-MAY-1998;   98US-0086486P.
PR   28-MAY-1998;   98US-0087098P.
PR   28-MAY-1998;   98US-0087208P.
PR   02-JUN-1998;   98US-0087609P.
PR   02-JUN-1998;   98US-0087759P.
PR   03-JUN-1998;   98US-0087827P.
PR   04-JUN-1998;   98US-0088025P.
PR   04-JUN-1998;   98US-0088028P.
PR   04-JUN-1998;   98US-0088029P.
PR   04-JUN-1998;   98US-0088033P.
PR   04-JUN-1998;   98US-0088326P.
PR   05-JUN-1998;   98US-0088167P.
PR   05-JUN-1998;   98US-0088202P.
PR   05-JUN-1998;   98US-0088212P.
PR   05-JUN-1998;   98US-0088217P.
PR   09-JUN-1998;   98US-0088655P.
PR   10-JUN-1998;   98US-0088722P.
PR   10-JUN-1998;   98US-0088738P.
PR   10-JUN-1998;   98US-0088740P.
PR   10-JUN-1998;   98US-0088811P.
PR   10-JUN-1998;   98US-0088824P.
PR   10-JUN-1998;   98US-0088825P.
PR   10-JUN-1998;   98US-0088826P.
PR   11-JUN-1998;   98US-0088861P.
PR   11-JUN-1998;   98US-0088863P.
PR   11-JUN-1998;   98US-0088876P.
PR   12-JUN-1998;   98US-0089090P.
PR   12-JUN-1998;   98US-0089105P.
PR   16-JUN-1998;   98US-0089512P.
PR   16-JUN-1998;   98US-0089514P.
PR   17-JUN-1998;   98US-0089538P.
PR   17-JUN-1998;   98US-0089598P.
PR   17-JUN-1998;   98US-0089653P.
PR   18-JUN-1998;   98US-0089908P.
PR   19-JUN-1998;   98US-0089952P.
PR   22-JUN-1998;   98US-0090246P.
PR   22-JUN-1998;   98US-0090252P.
PR   22-JUN-1998;   98US-0090254P.
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PR 24-JUN-1998; 98US-0090429P.
PR 24-JUN-1998; 98US-0090435P.
PR 24-JUN-1998; 98US-0090444P.
PR 24-JUN-1998; 98US-0090461P.
PR 24-JUN-1998; 98US-0090535P.
PR 24-JUN-1998; 98US-0090540P.
PR 25-JUN-1998; 98US-0090676P.
PR 25-JUN-1998; 98US-0090678P.
PR 25-JUN-1998; 98US-0090688P.
PR 25-JUN-1998; 98US-0090690P.
PR 25-JUN-1998; 98US-0090694P.
PR 25-JUN-1998; 98US-0090695P.
PR 25-JUN-1998; 98US-0090696P.
PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090862P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 01-JUL-1998; 98US-0091544P.
PR 02-JUL-1998; 98US-0091478P.
PR 02-JUL-1998; 98US-0091486P.
PR 02-JUL-1998; 98US-0091626P.
PR 02-JUL-1998; 98US-0091628P.
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Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Qy 2241 AA 2242
Db 2773 AA 2774

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DT 17-SEP-2003 (first entry)
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KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
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Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Qy 2241 AA 2242
Db 2773 AA 2774

RESULT 311
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ID ACD21867 standard; cDNA; 2846 BP.
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DT 25-AUG-2003 (first entry)
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DE Human secreted/transmembrane protein (PRO) cDNA #85.
XX
KW Human; gene; ss; secreted and transmembrane protein; PRO; TNF-alpha;
KW tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW prostate tumour; rectal tumour; cervical tumour; liver tumour.
XX
OS Homo sapiens.
XX
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

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Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774
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RESULT 312
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ID ACF13032 standard; cDNA; 2846 BP.
XX
AC ACF13032;
XX
DT 13-SEP-2003 (first entry)
XX
DE Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003036160-A1.
XX
PD 20-FEB-2003.
XX
PF 02-JUL-2002; 2002US-00188781.
XX
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
Db 2773 AA 2774

RESULT 313
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ID ACD25135 standard; cDNA; 2846 BP.
XX
AC ACD25135;
XX
DT 30-AUG-2003 (first entry)
XX
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XX
KW Human; gene; ss; secreted and transmembrane protein; PRO; TNF-alpha;
KW tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW prostate tumour; rectal tumour; cervical tumour; liver tumour.
XX
OS Homo sapiens.
XX
PN US2003044925-A1.
XX
PD 06-MAR-2003.
XX
PF 25-JUN-2002; 2002US-00180560.
XX
PR 18-SEP-1997; 97US-0059263P.
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PR 01-OCT-1998; 98US-0102687P.
PR 02-OCT-1998; 98US-0102965P.
PR 06-OCT-1998; 98US-0103258P.
PR 06-OCT-1998; 98US-0103449P.

Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
Db 2773 AA 2774

RESULT 314
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XX
AC ACF00184;
XX
DT 19-SEP-2003 (first entry)
XX
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XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003054474-A1.
XX
PD 20-MAR-2003.
XX
PF 22-JUL-2002; 2002US-00201530.
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PR 02-JUN-1999; 99WO-US012252.
PR 25-AUG-1999; 99US-00380137.
PR 28-FEB-2001; 2001WO-US006520.
PR 15-JAN-2002; 2002US-00052586.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-503631/47.
DR P-PSDB; ABR78311.
XX
PT New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT in gene therapy, or for preparing a medicament for treating a condition

```
PT   that is responsive to the PRO polypeptide or anti-PRO antibody.
XX
PS   Claim 2; Fig 169; 700pp; English.
XX
CC   The invention relates to human PRO secreted/transmembrane polypeptides
CC   (ABR78227-ABR78531) and nucleic acids encoding them (ACF00100-00404). The
CC   invention also relates to sequences at least 80% identical to the PRO
CC   nucleic acid and polypeptide sequences of the invention, recombinant
CC   vectors and host cells comprising a PRO nucleic acid, a method for the
CC   recombinant production of a PRO polypeptide, antibodies against a PRO
CC   polypeptide, and fusion proteins comprising a PRO polypeptide. Nucleic
CC   acids encoding PRO polypeptides of the invention were initially
CC   identified via homology screening using consensus sequences based on the
CC   extracellular domain sequences from known secreted proteins. Human cDNA
CC   libraries containing sequences of interest were identified using
CC   oligonucleotides based on the consensus sequences, and cDNA clones were
CC   isolated and characterised. The PRO polypeptides are useful for
CC   stimulating release of tumour necrosis factor-alpha (TNF-alpha) from
CC   human blood and may thus be used in the treatment of conditions in which
CC   enhanced TNF-alpha release would be beneficial. They are also useful for
CC   stimulating the proliferation or differentiation of chondrocytes and as
CC   such may be used in the treatment of various bone and/or cartilage
CC   disorders such as arthritis and sports injuries. The PRO polypeptides may
CC   be used in a method for detecting the presence of a tumour (e.g., an
CC   adrenal tumour, lung tumour, colon tumour, breast tumour, prostate
CC   tumour, rectal tumour, cervical tumour or liver tumour) in a mammal. This
CC   method involves comparing the level of expression of the PRO polypeptide
CC   in test and control samples, where a higher level of expression of PRO
CC   polypeptide in the test sample as compared to the control sample is
CC   indicative of the presence of a tumour. The PRO polypeptides are
CC   additionally useful for in drug screening to identify agonists and
CC   antagonists of PRO polypeptides. PRO nucleic acids are useful as
CC   hybridisation probes (for isolation of cDNA molecules), in chromosome and
CC   gene mapping, in the generation of antisense RNA and DNA and in gene
CC   therapy. The nucleic acids can also be used for mapping genes encoding
CC   PRO polypeptides, for genetic analysis of individuals with genetic
CC   disorders, and for generating either transgenic animals or knock-out
CC   animals which are useful in the development and screening of
CC   therapeutically useful compounds. Sequences ACF00100-00404 represent
CC   cDNAs encoding the human PRO secreted/transmembrane polypeptides of the
CC   invention. Note: The sequence data for this patent is also available in
CC   electronic format from USPTO at seqdata.uspto.gov/sequence.html
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

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  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

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Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 315
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ID   ACA60381 standard; cDNA; 2846 BP.
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AC   ACA60381;
XX
DT   11-JUN-2003  (first entry)
XX
DE   Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW   Human; secreted and transmembrane polypeptide; gene;
KW   ss. chromosome mapping; gene mapping; transgenic animal; knockout animal;
KW   therapeutic agent screening; chromosome identification; tissue typing;
KW   gene therapy.
XX
OS   Homo sapiens.
XX
PN   US2003018183-A1.
XX
PD   23-JAN-2003.
XX
PF   01-MAY-2002; 2002US-00063512.
XX
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-330984/31.
DR   P-PSDB; ABU71970.
XX
PT   New secreted and transmembrane PRO polypeptides and nucleic acid
PT   molecules encoding the polypeptides, useful in gene therapy or preparing
PT   a medicament for treating a condition that is responsive to the PRO
PT   polypeptide or antibody.
XX
PS   Disclosure; Fig 37; 409pp; English.
XX
CC   The invention describes novel isolated PRO polypeptides. The PRO
CC   polypeptides or anti-PRO antibodies are useful in preparing a medicament
CC   for treating a condition that is responsive to the PRO polypeptide or
CC   antibody. The PRO nucleotide sequences may be used as hybridisation
CC   probes in chromosome and gene mapping, or in generating antisense RNA and
CC   DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in
CC   assays to identify other proteins or molecules involved in binding
CC   reaction, to generate transgenic animals or knockout animals, which in
CC   turn are useful in the development and screening of therapeutically
CC   useful reagents, for chromosome identification, and tissue typing. The
CC   PRO polypeptides and nucleic acid molecules are also useful in gene
CC   therapy, and as molecular weight markers for protein electrophoresis
CC   purposes. The anti-PRO antibodies may be used in diagnostic assays for
CC   PRO, or for the affinity purification of PRO from recombinant cell
CC   culture or natural sources. This sequence encodes a novel human secreted
CC   and transmembrane PRO poypeptide
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
  Matches   87;  Conservative    0;  Mismatches   35;  Indels    0;  Gaps    0;

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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 316
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ID   ACA72241 standard; cDNA; 2846 BP.
XX
AC   ACA72241;
XX
DT   30-JUN-2003  (first entry)
XX
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DE Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; cytostatic; gene therapy;
KW chondrocyte stimulator; chromosome mapping; gene mapping;
KW transgenic animal; knock-out animal; tumour; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003032114-A1.
XX
PD 13-FEB-2003.
XX
PF 20-JUN-2002; 2002US-00176919.
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774
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RESULT 317
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XX
AC ACD04765;
XX
DT 06-AUG-2003 (first entry)

XX
DE Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW Human; ss; gene therapy; tumour necrosis factor alpha; TNF-alpha;
KW chondrocyte stimulation; tumour; tissue typing; gene.
XX
OS Homo sapiens.
XX
PN US2003032101-A1.
XX
PD 13-FEB-2003.
XX
PF 17-JUN-2002; 2002US-00173695.
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KW tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW prostate tumour; rectal tumour; cervical tumour; liver tumour.
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KW   tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
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Db       2773 AA 2774
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KW   chondrocyte proliferation; chondrocyte differentiation; tumour detection;
KW   tissue typing; gene.
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PF   27-JUN-2002; 2002US-00184630.
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774


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DT   11-AUG-2003  (first entry)
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KW   Human; gene; ss; secreted and transmembrane protein; PRO;
KW   chromosome mapping; gene mapping; gene therapy;
KW   tumour necrosis factor alpha; TNF-alpha; chondrocyte; tumour.
XX
OS   Homo sapiens.
XX
PN   US2003036134-A1.
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PD   20-FEB-2003.
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PF   27-JUN-2002; 2002US-00184631.
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Qy       2241 AA 2242
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KW chondrocyte stimulator; chromosome mapping; gene mapping;
KW transgenic animal; knockout animal; tissue typing;
KW chondrocyte proliferation; chondrocyte differentiation;
KW tumour necrosis factor-alpha stimulation; TNF-alpha stimulation; gene;
KW ss.
XX
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XX
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KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
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OS   Homo sapiens.
XX
PN   US2003027275-A1.
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KW   tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW   prostate tumour; rectal tumour; cervical tumour; liver tumour.
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KW   gene mapping; transgenic animal; knockout animal; tissue typing;
KW   chromosome identification; tumour; chondrocyte proliferation;
KW   chondrocyte differentiation; tumour necrosis factor-alpha release;
KW   gene therapy; gene; ss.
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XX
PN   US2003036118-A1.
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XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
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DR   WPI; 2003-402071/38.
DR   P-PSDB; AB019195.
XX
PT   New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT   in gene therapy, chromosome identification, tissue typing, for detecting
PT   the presence of tumor in a mammal, or as hybridization probes in gene
PT   mapping.
XX
PS   Claim 2; SEQ ID NO 169; 707pp; English.
XX
CC   The invention describes a novel isolated PRO polypeptide. The PRO
CC   polypeptide or anti-PRO antibody is useful for preparing a medicament for
CC   treating a condition that is responsive to the PRO polypeptide or anti-
CC   PRO antibody. The PRO nucleotide sequences are useful as hybridisation
CC   probes in chromosome and gene mapping, or in generating antisense RNA and
CC   DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in
CC   assays to identify other proteins or molecules involved in binding
CC   reaction, to generate transgenic animals or knockout animals, which in
CC   turn are useful in the development and screening of therapeutically
CC   useful reagents, for chromosome identification, and tissue typing. The
CC   PRO polypeptides and nucleic acid molecules are also useful for detecting
CC   the presence of tumour in a mammal, stimulating proliferation or
CC   differentiation of chondrocyte cells, stimulating the release of tumour
CC   necrosis factor-alpha from human blood, in gene therapy, or as molecular
CC   weight markers for protein electrophoresis purposes. The anti-PRO
CC   antibodies may be used in diagnostic assays for PRO, or for the affinity
CC   purification of PRO from recombinant cell culture or natural sources.
CC   This sequence encodes a novel human secreted and transmembrane PRO
CC   polypeptide
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

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KW   tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW   tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW   prostate tumour; rectal tumour; cervical tumour; liver tumour.
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XX
PN   US2003036123-A1.
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KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
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DT   28-AUG-2003  (first entry)
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XX
KW   Human; gene; ss; secreted and transmembrane protein; PRO; TNF-alpha;
KW   tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW   tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW   prostate tumour; rectal tumour; cervical tumour; liver tumour.
XX
OS   Homo sapiens.
XX
PN   US2003044916-A1.
XX
PD   06-MAR-2003.
XX
PF   20-JUN-2002; 2002US-00176484.
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
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Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

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Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
Db 2773 AA 2774

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XX
DT 10-JUN-2003 (first entry)
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XX
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OS Homo sapiens.
XX
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XX
PD 16-JAN-2003.
XX
PF 03-MAY-2002; 2002US-00063616.
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PR 29-JUN-2001; 2001US-00869599.
PR 18-JUL-2001; 2001US-00908827.
PR 06-DEC-2001; 2001US-00006867.
XX
PA (GETH) GENENTECH INC.
XX
PI Eaton DL, Filvaroff E, Gerritsen ME, Goddard A, Godowski PJ;
PI Grimaldi JC, Gurney AL, Watanabe CK, Wood WI;
XX
DR WPI; 2003-330485/31.
DR P-PSDB; ABU71524.
XX
PT New isolated antibody specifically binding a PRO polypeptide, useful for
PT the preparation of a medicament for treating disorders with the aberrant
PT expression or activity of the PRO polypeptide, such as tumor conditions
PT and cancer.

XX
PS Example 4; Page 104-105; 406pp; English.
XX
CC The invention relates to an antibody that binds to a polypeptide with a
CC fully defined sequence given in the specification. The methods and
CC compositions (containing antibodies that specifically bind a PRO
CC polypeptide) of the present invention are useful for the preparation of a
CC medicament for the treatment of disorders associated with the aberrant
CC expression or activity of the PRO polypeptide, such as tumour conditions
CC and cancer. They can also be used to generate transgenic or knockout
CC animals useful in the development and screening of therapeutically useful
CC reagents. The PRO polypeptides and encoding nucleic acids can be used as
CC molecular weight markers for protein electrophoresis, chromosome
CC identification and tissue typing. The PRO polypeptides are useful to
CC induce angiogenesis e.g wound healing; in the treatment of sports-related
CC joint problems, articular cartilage defects, osteoarthritis or rheumatoid
CC arthritis; diabetes; hyperinsulinaemia and hypoinsulinaemia. The
CC antibodies may be used in various diagnostic, competitive binding and/or
CC immunoprecipitation assays. The present sequence represents a cDNA
CC encoding a PRO polypeptide of the invention
XX
SQ Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774
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KW cytostatic; antiarthritic; osteopathic; adrenal tumour; lung tumour;
KW colon tumour; breast tumour; prostate tumour; rectal tumour;
KW cervical tumour; liver tumour; TNF-alpha release; arthritis;
KW tumour necrosis factor alpha; chondrocyte cell; bone disorder;
KW cartilage disorder; sports injury.
XX
OS Homo sapiens.
XX
PN US2003036156-A1.
XX
PD 20-FEB-2003.
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PF 02-JUL-2002; 2002US-00188767.
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KW tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW prostate tumour; rectal tumour; cervical tumour; liver tumour.
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Best Local Similarity 71.3%; Pred. No. 0.00023;
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Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774
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RESULT 334
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ID ACC88513 standard; cDNA; 2846 BP.
XX
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XX
DT 05-AUG-2003 (first entry)
XX
DE Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003027266-A1.
XX
PD 06-FEB-2003.
XX
PF 18-JUN-2002; 2002US-00174588.
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 335
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DT   27-AUG-2003  (first entry)
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DE   Human secreted/transmembrane protein (PRO) cDNA #85.
XX
KW   Human; gene; ss; secreted and transmembrane protein; PRO; TNF-alpha;
KW   tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
KW   tissue typing; adrenal tumour; lung tumour; colon tumour; breast tumour;
KW   prostate tumour; rectal tumour; cervical tumour; liver tumour.
XX
OS   Homo sapiens.
XX
PN   US2003054483-A1.
XX
PD   20-MAR-2003.
XX
PF   26-JUL-2002; 2002US-00205907.
XX
PR   05-JUN-2000; 2000US-0209832P.
PR   28-FEB-2001; 2001WO-US006520.
PR   15-JAN-2002; 2002US-00052586.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-479876/45.
DR   P-PSDB; ABO15739.
XX
PT   Three hundred and five nucleic acids encoding PRO polypeptides, useful
PT   for the manufacture of a medicament for diagnosing or treating tumor or
PT   for measuring or detecting expression of an associated gene.
XX
PS   Claim 2; Fig 169; 699pp; English.
XX
CC   The invention discloses human nucleic acids encoding secreted and
CC   transmembrane (PRO) polypeptides, with or without their associated signal
CC   peptide. Also disclosed is an antibody that specifically binds to the PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor alpha (TNF-alpha) from human blood by contacting the blood with a
CC   PRO polypeptide, a method for stimulating the proliferation or
CC   differentiation of chondrocyte cells by contacting the cells with a PRO
CC   polypeptide, a method for detecting the presence of a tumour in a mammal
CC   and an oligonucleotide probe derived from any of the PRO nucleotide
CC   sequences. The nucleotide sequences are useful as probes, in chromosome
CC   and gene mapping, in generating antisense RNA and DNA, in preparing PRO
CC   polypeptides by recombinant techniques and in gene therapy (e.g. for
CC   replacement of defective gene). The PRO polypeptides are useful as
CC   molecular weight markers for protein electrophoresis purposes, for
CC   chromosome identification, as chromosome markers, as therapeutic agents,
CC   for stimulating the release of TNF-alpha from human blood, for
CC   stimulating the proliferation or differentiation of chondrocytes and
CC   detecting the presence, prevention and/or treatment of a tumour, such as
CC   adrenal, lung, colon, breast, prostate, rectal, cervical or liver tumour.
CC   The PRO polypeptides and nucleic acids may also be used diagnostically
CC   for tissue typing. The sequence presented is a cDNA encoding one of the
CC   PRO polypeptides of the invention. Note: The sequence data for this
CC   patent can also be obtained in electronic format directly from USPTO at
CC   seqdata.uspto.goc/sequence.html
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
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Qy       2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
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Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
              ||
Db       2773 AA 2774


RESULT 336
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ID   ABX75625 standard; cDNA; 2846 BP.
XX
AC   ABX75625;
XX
DT   26-MAR-2003  (first entry)
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DE   Human cDNA encoding secreted/transmembrane protein, PRO1344.
XX
KW   Human; ss; gene; secreted protein; transmembrane protein; PRO;
KW   antiarthritic; vulnerary; tumour necrosis factor-alpha;
KW   chondrocyte cell proliferation; chondrocyte cell differentiation; tumour;
KW   adrenal tumour; lung tumour; colon tumour; breast tumour;
KW   prostate tumour; rectal tumour; cervical tumour; liver tumour;
KW   bone disorder; cartilage disorder; arthritis; sports injury.
XX
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OS Homo sapiens.
XX
PN US2003022298-A1.
XX
PD 30-JAN-2003.
XX
PF 20-JUN-2002; 2002US-00176913.
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PR 18-SEP-1997; 97US-0059263P.
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Db       2773 AA 2774


RESULT 337
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ID   ACA64004 standard; cDNA; 2846 BP.
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AC   ACA64004;
XX
DT   16-JUN-2003  (first entry)
XX
DE   cDNA encoding human PRO polypeptide #19.
XX
KW   Human; PRO polypeptide; secreted and transmembrane protein;
KW   anti-PRO antibody; diagnostic assay; gene expression; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2002182638-A1.
XX
PD   05-DEC-2002.
XX
PF   02-MAY-2002; 2002US-00063547.
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PR   18-JUL-2001; 2001US-00908827.
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-328612/04.
DR   P-PSDB; ABU72305.
XX
PT   An isolated secreted transmembrane polypeptide designated PRO, useful as
PT   a therapeutic agent.
XX
PS   Disclosure; Fig 37; 236pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides, and the polynucleotide sequences encoding them. The PRO
CC   polypeptides are secreted and transmembrane proteins. The PRO
CC   polypeptides and polynucleotides are useful for preparing a medicament
CC   useful in the treatment of a condition responsive to anti-PRO antibody.
CC   Anti-PRO antibodies are useful in diagnostic assays for PRO, by detecting
CC   its expression in specific cells, tissues or serum, and for affinity
CC   purification of PRO from recombinant cell culture or natural sources.
CC   ACA63986-ACA64069 represent cDNA sequences encoding the human PRO
CC   polypeptides of the invention
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
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Db       2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db       2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy       2241 AA 2242
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Db       2773 AA 2774
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XX
DT 16-MAY-2003 (first entry)
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DE Human PRO polynucleotide #85.
XX
KW Human; PRO; gene; ss; cytostatic; chromosome mapping; gene mapping;
KW protein electrophoresis; tumour necrosis factor-alpha; TNF-alpha; blood;
KW chondrocyte differentiation; chondrocyte proliferation; tumour.
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OS Homo sapiens.
XX
PN US2003032102-A1.
XX
PD 13-FEB-2003.
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PF 17-JUN-2002; 2002US-00173697.
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
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Qy       2241 AA 2242
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Db       2773 AA 2774
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RESULT 339
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AC ACA97304;
XX
DT 24-JUL-2003 (first entry)
XX
DE Novel human secreted and transmembrane protein PRO1344 cDNA.
XX
KW Human; secreted and transmembrane protein; PRO; cytostatic; gene therapy;
KW chromosome mapping; gene mapping; transgenic animal; knock-out animal;
KW tumour; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003036117-A1.
XX
PD 20-FEB-2003.
XX
PF 21-JUN-2002; 2002US-00176751.
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PR 18-SEP-1997; 97US-0059263P.
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Qy       2241 AA 2242
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Db       2773 AA 2774
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RESULT 342
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DT 19-AUG-2003 (first entry)
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DE Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003032138-A1.
XX
PD 13-FEB-2003.
XX
PF 02-JUL-2002; 2002US-00187885.
XX
PR 24-JUN-1998; 98US-0090540P.
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PR 01-DEC-1998; 98WO-US025108.
PR 08-MAR-1999; 99WO-US005028.
PR 14-MAY-1999; 99WO-US010733.
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PR 09-JUL-2001; 2001WO-US021735.
PR 29-AUG-2001; 2001WO-US027099.
PR 15-JAN-2002; 2002US-00052586.
XX
PA (GETH) GENENTECH INC.
XX
PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;
PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;
XX
DR WPI; 2003-341977/32.
DR P-PSDB; ABR70047.
XX
PT New secreted and transmembrane PRO polypeptide useful in preparing a
PT medicament for treating a condition that is responsive to the PRO
PT polypeptide or anti-PRO antibody.
XX
PS Claim 2; Fig 169; 707pp; English.
XX
CC The invention relates to human PRO secreted/transmembrane polypeptides
CC (ABR69963-ABR70267) and nucleic acids encoding them (ACC90994-ACC91298).
CC The invention also relates to sequences at least 80% identical to the PRO
CC nucleic acid and polypeptide sequences of the invention, recombinant
CC vectors and host cells comprising a PRO nucleic acid, a method for the
CC recombinant production of a PRO polypeptide, antibodies against a PRO
CC polypeptide, and fusion proteins comprising a PRO polypeptide. Nucleic
CC acids encoding PRO polypeptides of the invention were initially
CC identified via homology screening using consensus sequences based on the
CC extracellular domain sequences from known secreted proteins. Human cDNA
CC libraries containing sequences of interest were identified using
CC oligonucleotides based on the consensus sequences, and cDNA clones were
CC isolated and characterised. The PRO polypeptides are useful for
CC stimulating release of tumour necrosis factor-alpha (TNF-alpha) from
CC human blood and may thus be used in the treatment of conditions in which
CC enhanced TNF-alpha release would be beneficial. They are also useful for
CC stimulating the proliferation or differentiation of chondrocytes and as
CC such may be used in the treatment of various bone and/or cartilage
CC disorders such as arthritis and sports injuries. The PRO polypeptides may
CC be used in a method for detecting the presence of a tumour (e.g., an
CC adrenal tumour, lung tumour, colon tumour, breast tumour, prostate
CC tumour, rectal tumour, cervical tumour or liver tumour) in a mammal. This
CC method involves comparing the level of expression of the PRO polypeptide
CC in test and control samples, where a higher level of expression of PRO
CC polypeptide in the test sample as compared to the control sample is
CC indicative of the presence of a tumour. The PRO polypeptides are
CC additionally useful for in drug screening to identify agonists and
CC antagonists of PRO polypeptides. PRO nucleic acids are useful as
CC hybridisation probes (for isolation of cDNA molecules), in chromosome and
CC gene mapping, in the generation of antisense RNA and DNA and in gene
CC therapy. The nucleic acids can also be used for mapping genes encoding
CC PRO polypeptides, for genetic analysis of individuals with genetic
CC disorders, and for generating either transgenic animals or knock-out
CC animals which are useful in the development and screening of
CC therapeutically useful compounds. Sequences ACC90994-ACC91298 represent
CC cDNAs encoding the human PRO secreted/transmembrane polypeptides of the
CC invention. Note: The sequence data for this patent is also available in
CC electronic format from USPTO at seqdata.uspto.gov/sequence.html

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  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
  Best Local Similarity   71.3%;  Pred. No. 0.00023;
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Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 343
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ID   ACC88820 standard; cDNA; 2846 BP.
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AC   ACC88820;
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DT   11-AUG-2003  (first entry)
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DE   Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
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KW   Human; PRO; secreted protein; transmembrane protein;
KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003036132-A1.
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PD   20-FEB-2003.
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PF   28-JUN-2002; 2002US-00184629.
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KW Human; PRO; gene; ss; tumour; cytostatic; cancer; secreted protein; lung;
KW transmembrane protein; tumour necrosis factor alpha; TNF-alpha; adrenal;
KW chondrocyte cell; colon; breast; prostate; rectum; cervix; liver.
XX
OS Homo sapiens.
XX
PN US2003008353-A1.
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PD 09-JAN-2003.
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PR   15-SEP-1999;   99WO-US021090.
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PR   30-DEC-1999;   99WO-US031274.
PR   05-JAN-2000; 2000WO-US000219.
PR   18-FEB-2000; 2000WO-US004341.
PR   18-FEB-2000; 2000WO-US004342.
PR   22-FEB-2000; 2000WO-US004414.
PR   24-FEB-2000; 2000WO-US005004.
PR   01-MAR-2000; 2000WO-US005601.
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PR   15-MAR-2000; 2000WO-US006884.
PR   30-MAR-2000; 2000WO-US008439.
PR   17-MAY-2000; 2000WO-US013705.
PR   22-MAY-2000; 2000WO-US014042.
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PR   02-JUN-2000; 2000WO-US015264.
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PR   08-NOV-2000; 2000WO-US030952.
PR   01-DEC-2000; 2000WO-US032678.
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PR   28-FEB-2001; 2001WO-US006520.
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PR   20-JUN-2001; 2001WO-US019692.
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PR   09-JUL-2001; 2001WO-US021735.
PR   29-AUG-2001; 2001WO-US027099.
PR   15-JAN-2002; 2002US-00052586.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-341328/32.
DR   P-PSDB; ABO01521.
XX
PT   Three hundred and five nucleic acids encoding secreted and transmembrane
PT   polypeptides, designated as PRO, useful for detecting the presence of, or
PT   treating tumor, e.g. adrenal, lung, colon, breast, prostate, rectal,
PT   cervical or liver tumor.
XX
PS   Claim 2; Fig 169; 707pp; English.
XX
CC   The invention relates to human PRO polypeptides (secreted and
CC   transmembrane polypeptides) and the polynucleotides encoding them. The
CC   invention also relates to an antibody that specifically binds to a PRO
CC   polypeptide, a method for stimulating the release of tumour necrosis
CC   factor alpha (TNF-alpha) from human blood by contacting the blood with a
CC   PRO polypeptide and a method for stimulating the proliferation or
CC   differentiation of chondrocyte cells by contacting the cells with a PRO
CC   polypeptide. The polypeptides and polynucleotides are useful for
CC   detecting the presence of a tumour, such as an adrenal, lung, colon,
CC   breast, prostate, rectal, cervical or liver tumour, and for treating such
CC   tumours. The polynucleotides are useful as hybridisation probes, in
CC   chromosome and gene mapping and in generating antisense RNA or DNA. The
CC   polypeptides are useful as pharmaceuticals, diagnostics, biosensors or
CC   bioreactors. Both are useful in tissue typing. Sequences ACD06933-
CC   ACD07237 represent human PRO polynucleotides of the invention. Note: The
CC   sequence data for this patent is also available in electronic format from
CC   USPTO at seqdata.uspto.gov/sequence.html
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

  Query Match             3.0%;  Score 66.6;  DB 8;  Length 2846;
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Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 345
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AC   ACA67468;
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DT   24-JUN-2003  (first entry)
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DE   Human PRO polynucleotide #85.
XX
KW   Human; PRO; gene; ss; tumour necrosis factor-alpha; TNF-alpha; blood;
KW   chondrocyte cell; tumour; adrenal; kidney; lung; colon; breast; prostate;
KW   rectum; cervix; liver; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2003017542-A1.
XX
PD   23-JAN-2003.
XX
PF   20-JUN-2002; 2002US-00176749.
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Qy 2241 AA 2242
Db 2773 AA 2774

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XX
AC ACC81523;
XX
DT 28-JUL-2003 (first entry)
XX
DE Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003032137-A1.
XX
PD 13-FEB-2003.
XX
PF 02-JUL-2002; 2002US-00187745.
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PR 18-SEP-1997; 97US-0059263P.
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Best Local Similarity 71.3%; Pred. No. 0.00023;
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Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
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Db 2773 AA 2774

RESULT 347
ACA91268
ID ACA91268 standard; cDNA; 2846 BP.
XX
AC ACA91268;
XX
DT 14-JUL-2003 (first entry)
XX
DE cDNA encoding human PRO polypeptide #19.
XX
KW Human; PRO polypeptide; secreted protein; transmembrane protein; rectal;
KW lung; stomach; oesophageal; skin; tumour; cancer; cytostatic;
KW gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003018168-A1.
XX
PD 23-JAN-2003.
XX
PF 02-MAY-2002; 2002US-00063569.
XX
PR 30-DEC-1998; 98KR-00062142.
PR 08-MAR-1999; 99WO-US005028.
PR 14-MAY-1999; 99US-00311832.
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PR 18-OCT-1999; 99US-00403297.
PR 12-NOV-1999; 99US-00423844.
PR 30-DEC-1999; 99WO-US031274.
PR 18-FEB-2000; 2000WO-US004341.
PR 01-MAR-2000; 2000WO-US005601.

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PR   21-MAR-2000; 2000WO-US007532.
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PR   22-AUG-2000; 2000US-00644848.
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PR   10-NOV-2000; 2000WO-US030873.
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PR   20-DEC-2000; 2000US-00747259.
PR   20-DEC-2000; 2000WO-US034956.
PR   28-FEB-2001; 2001WO-US006520.
PR   22-MAR-2001; 2001US-00816744.
PR   10-MAY-2001; 2001US-00854208.
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PR   30-MAY-2001; 2001US-00870574.
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PR   29-JUN-2001; 2001US-00869599.
PR   18-JUL-2001; 2001US-00908827.
PR   06-DEC-2001; 2001US-00006867.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Eaton DL,  Filvaroff E,  Gerritsen ME,  Goddard A,  Godowski PJ;
PI   Grimaldi JC,  Gurney AL,  Watanabe CK,  Wood WI;
XX
DR   WPI; 2003-401699/38.
DR   P-PSDB; ABU90978.
XX
PT   New isolated, secreted and transmembrane PRO polypeptide, useful for the
PT   diagnosis, prevention and treatment of rectal, lung, stomach, esophageal
PT   or skin cancers.
XX
PS   Disclosure; Fig 37; 235pp; English.
XX
CC   The present invention relates to the isolation of novel human PRO
CC   polypeptides, and the polynucleotide sequences encoding them. The PRO
CC   polypeptides are secreted and transmembrane proteins. The PRO polypeptide
CC   and polynucleotide sequences are useful for the diagnosis, prevention and
CC   treatment of rectal, lung, stomach, oesophageal or skin tumours, and/or
CC   cancers. The PRO polypeptides are also useful as molecular weight
CC   markers. The PRO polynucleotide sequences are useful for chromosome
CC   identification, hybridisation probes, and for screening libraries of
CC   human cDNA, genomic DNA or mRNA. They may also be used in gene therapy,
CC   particularly for replacing a defective gene. ACA91250-ACA91333 represent
CC   cDNA sequences encoding the human PRO polypeptides of the invention
XX
SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;

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Qy       2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
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Qy       2241 AA 2242
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Db       2773 AA 2774


RESULT 348
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ID   ACC89127 standard; cDNA; 2846 BP.
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DT   11-AUG-2003  (first entry)
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XX
KW   Human; PRO; secreted protein; transmembrane protein;
KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
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OS   Homo sapiens.
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PD   06-FEB-2003.
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PF   19-JUN-2002; 2002US-00175743.
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PR 25-SEP-1998; 98US-0101786P.
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Query Match 3.0%; Score 66.6; DB 8; Length 2846;
Best Local Similarity 71.3%; Pred. No. 0.00023;
Matches 87; Conservative 0; Mismatches 35; Indels 0; Gaps 0;

Qy 2121 CCTTTGCTTTACCACTCTTTCCTTTTATCTTATTAATAAAAATGTTGGTCTCCACCACTG 2180
Db 2653 CCTTTTCCTTCCCCATCTCTTGTACACATTTTAATAAAATAAGGGTTGGCTTCTGAACTA 2712

Qy 2181 NCTCCCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2240
Db 2713 CAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA 2772

Qy 2241 AA 2242
Db 2773 AA 2774

RESULT 349
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XX
AC ACC86483;
XX
DT 28-JUL-2003 (first entry)
XX
DE Human secreted polypeptide PRO1344-encoding cDNA, SEQ ID NO:169.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS Homo sapiens.
XX
PN US2003027268-A1.
XX
PD 06-FEB-2003.
XX
PF 18-JUN-2002; 2002US-00175740.
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RESULT 350
ACC89741
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ID   ACC89741 standard; cDNA; 2846 BP.
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DT   11-AUG-2003  (first entry)
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KW   Human; PRO; secreted protein; transmembrane protein;
KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
XX
OS   Homo sapiens.
XX
PN   US2003027274-A1.
XX
PD   06-FEB-2003.
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PF   21-JUN-2002; 2002US-00176750.
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KW   Human; PRO; secreted protein; transmembrane protein;
KW   extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW   chondrocyte; proliferation; differentiation; cartilage disorder;
KW   bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW   adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW   liver; drug screening; transgenic animal; genetic analysis;
KW   antiarthritic; vulnerary; gene therapy; gene; ss.
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OS   Homo sapiens.
XX
PN   US2003032135-A1.
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PR   15-JAN-2002; 2002US-00052586.
XX
PA   (GETH ) GENENTECH INC.
XX
PI   Baker KP,  Chen J,  Desnoyers L,  Goddard A,  Godowski PJ,  Gurney AL;
PI   Pan J,  Smith V,  Watanabe CK,  Wood WI,  Zhang Z;
XX
DR   WPI; 2003-466225/44.
DR   P-PSDB; ABR71877.
XX
PT   New secreted and transmembrane PRO polypeptides and nucleic acids, useful
PT   in gene therapy, or for preparing a medicament for treating a condition
PT   that is responsive to the PRO polypeptide or anti-PRO antibody.
XX
PS   Claim 2; Fig 169; 707pp; English.
XX
CC   The invention relates to human PRO secreted/transmembrane polypeptides
CC   (ABR71793-ABR72097) and nucleic acids encoding them (ACC92836-ACC93140).
CC   The invention also relates to sequences at least 80% identical to the PRO
CC   nucleic acid and polypeptide sequences of the invention, recombinant
CC   vectors and host cells comprising a PRO nucleic acid, a method for the
CC   recombinant production of a PRO polypeptide, antibodies against a PRO
CC   polypeptide, and fusion proteins comprising a PRO polypeptide. Nucleic
CC   acids encoding PRO polypeptides of the invention were initially
CC   identified via homology screening using consensus sequences based on the
CC   extracellular domain sequences from known secreted proteins. Human cDNA
CC   libraries containing sequences of interest were identified using
CC   oligonucleotides based on the consensus sequences, and cDNA clones were
CC   isolated and characterised. The PRO polypeptides are useful for
CC   stimulating release of tumour necrosis factor-alpha (TNF-alpha) from
CC   human blood and may thus be used in the treatment of conditions in which
CC   enhanced TNF-alpha release would be beneficial. They are also useful for
CC   stimulating the proliferation or differentiation of chondrocytes and as
CC   such may be used in the treatment of various bone and/or cartilage
CC   disorders such as arthritis and sports injuries. The PRO polypeptides may
CC   be used in a method for detecting the presence of a tumour (e.g., an
CC   adrenal tumour, lung tumour, colon tumour, breast tumour, prostate
CC   tumour, rectal tumour, cervical tumour or liver tumour) in a mammal. This
CC   method involves comparing the level of expression of the PRO polypeptide
CC   in test and control samples, where a higher level of expression of PRO
CC   polypeptide in the test sample as compared to the control sample is
CC   indicative of the presence of a tumour. The PRO polypeptides are
CC   additionally useful for in drug screening to identify agonists and
CC   antagonists of PRO polypeptides. PRO nucleic acids are useful as
CC   hybridisation probes (for isolation of cDNA molecules), in chromosome and
CC   gene mapping, in the generation of antisense RNA and DNA and in gene
CC   therapy. The nucleic acids can also be used for mapping genes encoding
CC   PRO polypeptides, for genetic analysis of individuals with genetic
CC   disorders, and for generating either transgenic animals or knock-out
CC   animals which are useful in the development and screening of
CC   therapeutically useful compounds. Sequences ACC92836-ACC93140 represent
CC   cDNAs encoding the human PRO secreted/transmembrane polypeptides of the
CC   invention. Note: The sequence data for this patent is also available in
CC   electronic format from USPTO at seqdata.uspto.gov/sequence.html
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SQ   Sequence 2846 BP; 768 A; 696 C; 745 G; 637 T; 0 U; 0 Other;
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KW   bone disorder; cartilage disorder; sports injury; arthritis; cytostatic;
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